

ATLAS OF THE MOON (second part)

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Abstract

The first steps in the study of the Moon were the Moon explorations by means of manned spacecrafts started in the 1970s. The next step in studying the Moon must be manned expeditions, which will create first temporary bases on the Moon followed by the permanent bases. The problem of the Moon management by a human is associated with two objectives: first, living conditions must be created for the astronauts working at bases and second, the staging ground must be developed for the space flights of the second stage.

Key words: Moon, Albedo, Polarization, Color Index

1. Introduction

In the final run, the locations most suitable to build the Moon base are those with a fine ground containing a large amount of titanium dioxide. The primary goal is to study the looseness and maturity of the ground, while another objective is associated with the chemical and mineralogical zoning of the Moon surface.

Our goal is to identify the typical regions by considering the mentioned parameters and regions similar to the landing regions of “Apollo” and “Luna” series spacecrafts and evaluate their distribution on the Moon surface. This scientific work is dedicated to this issue.

2. Observations

This atlas has been obtained from many years of observation of the lunar surface from different observatories:

Abastumani Astrophysical Observatory [1,4,8,11], Institute of Astronomy of Kharkiv (Ukraine) [2,3,7,10] and Meudon Observatory (France) [6].

The table is given: Crater name, Latitude, Longitude, Diameter, polarization(min,max), Color Index, Albedo ($\lambda=6200\text{\AA}$) and m is an Albedo ($\lambda=5500\text{\AA}$).

75. Bessel



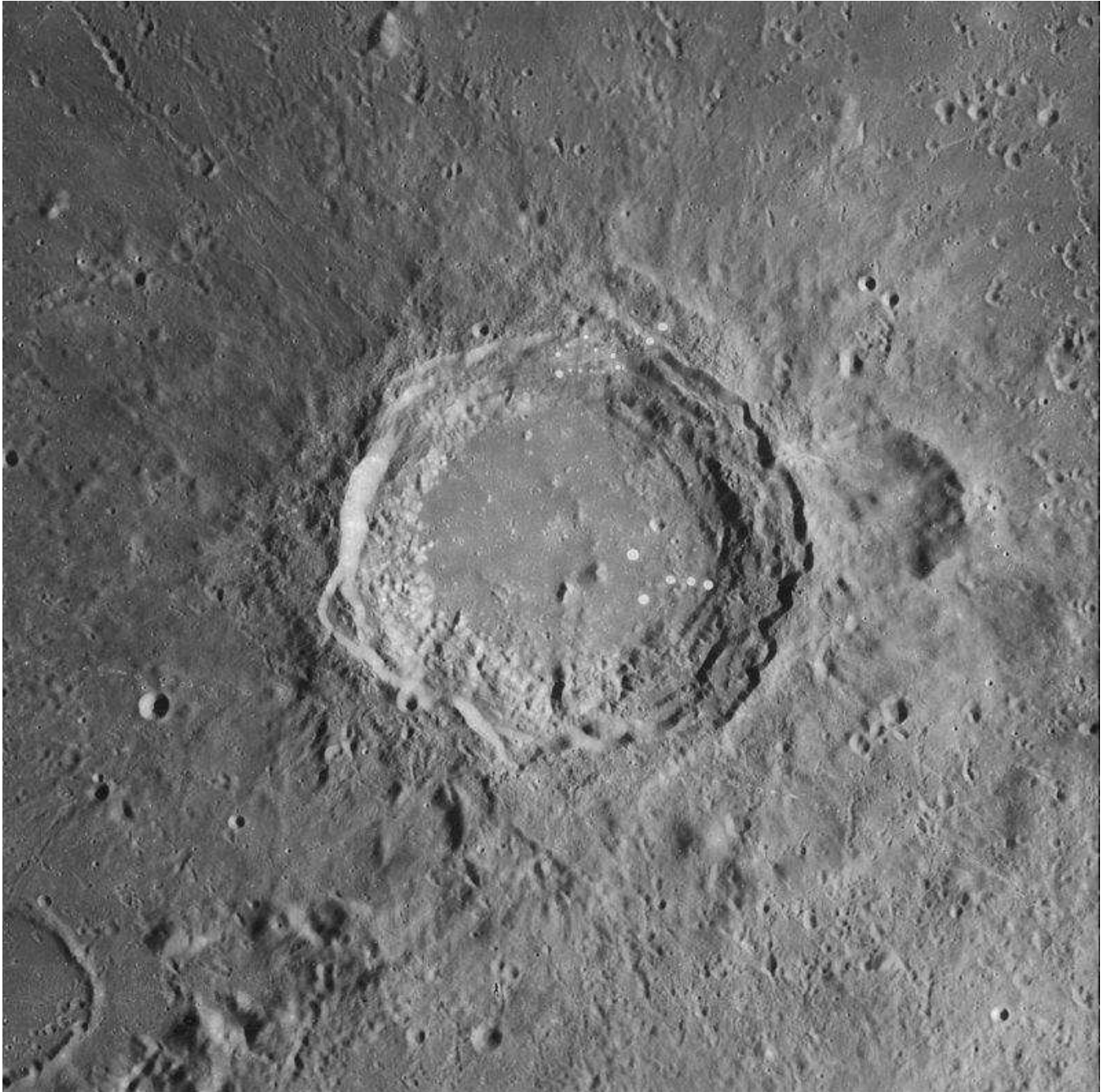
| | Latitude | Longitude | Diameter | Polarization min[1,8] | Color Index [2,7] | Albedo [3,7] | m [5,7] |
|--------|----------|-----------|----------|--------------------------|----------------------|-----------------|------------|
| Bessel | 21.8° N | 17.9° E | 16 km | 1.11 | 1.18 | 9.30 | 9.70 |

76. Dionysius



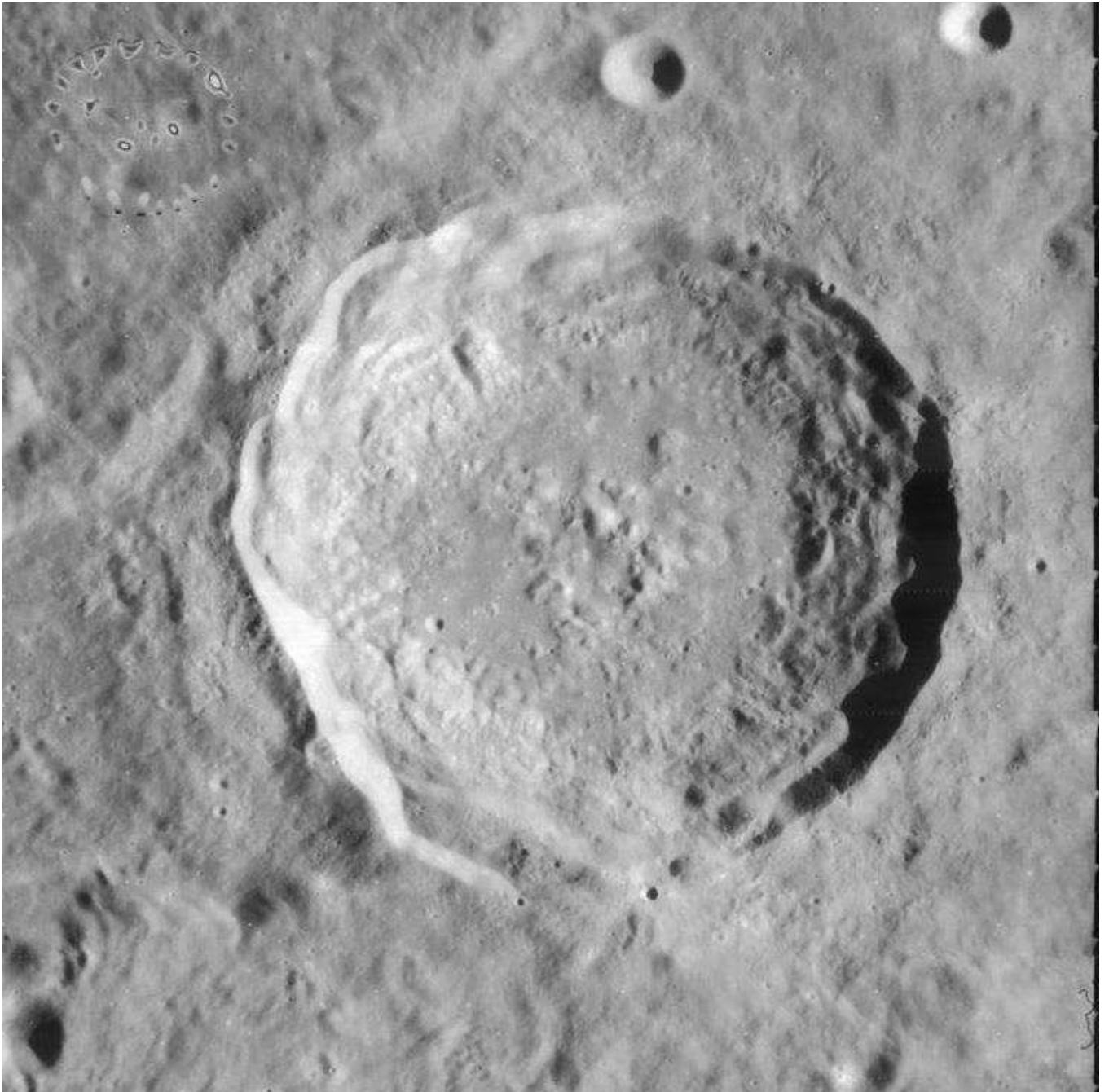
| | Latitude | Longitude | Diameter | Polarization min[1,8] | Color Index [2,7] | Albedo [3,7] | m [5,7] |
|-----------|----------|-----------|----------|--------------------------|----------------------|-----------------|------------|
| Dionysius | 2.8° N | 17.3° E | 18 km | 0.86 | 1.19 | 12.40 | 12.50 |

77. Aristoteles



| | Latitude | Longitude | Diameter | Polarization min[1,8] | Color Index [2,7] | Albedo [3,7] | m [5,7] |
|-------------|----------|-----------|----------|--------------------------|----------------------|-----------------|------------|
| Aristoteles | 50.2° N | 17.4° E | 87 km | 1.16 | 1.32 | 15.20 | 15.70 |

78. Eudoxus



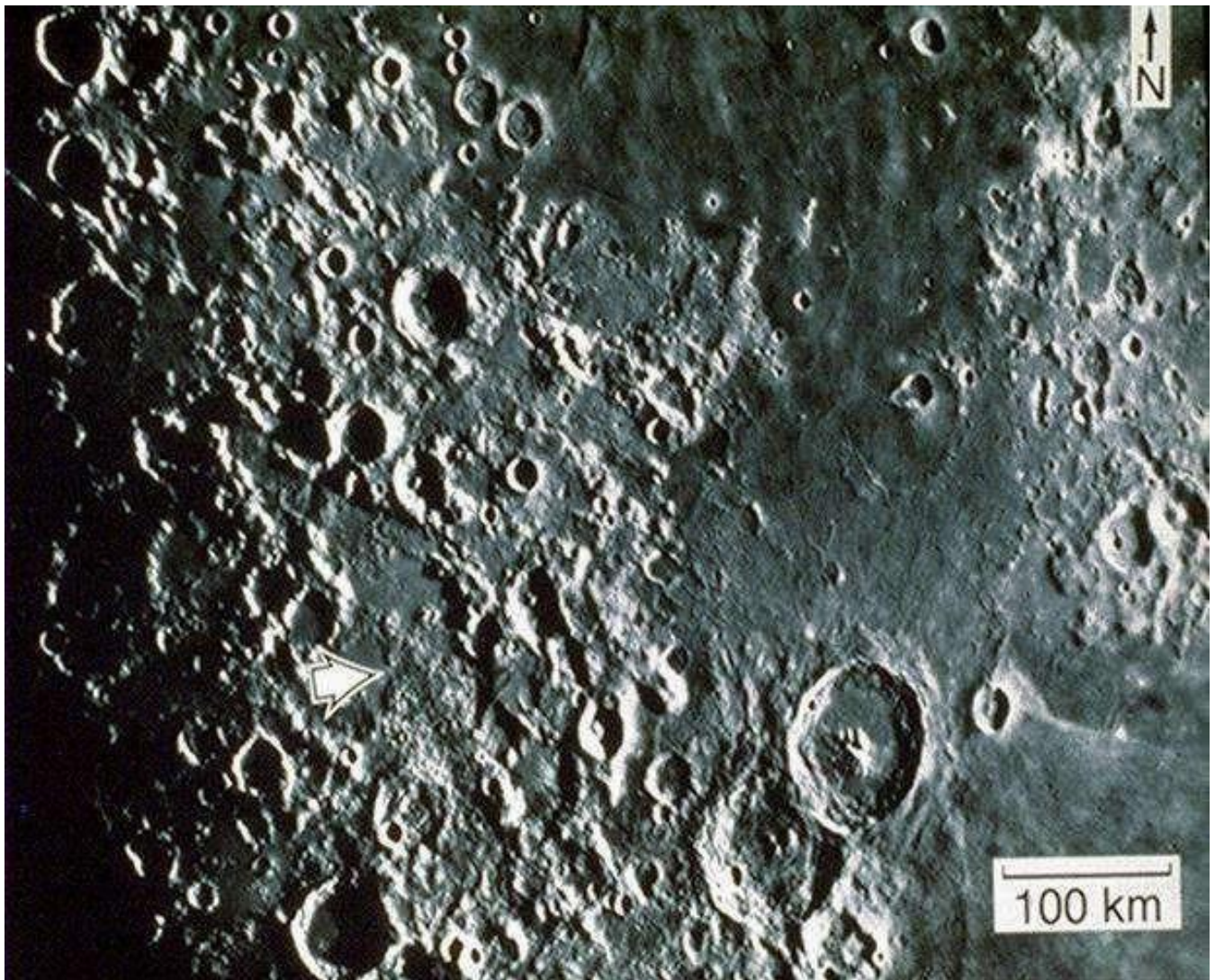
| | Latitude | Longitude | Diameter | Polarization | | Color Index [2,7] | Albedo [3,7] | m [5,7] |
|---------|----------|-----------|----------|-------------------|------------------|----------------------|-----------------|------------|
| Eudoxus | 44.3° N | 16.3° E | 67 km | 1.10 min [1,8] | 8.0 max [4,8] | 1.26 | 15.20 | 15.10 |

79. Menelaus



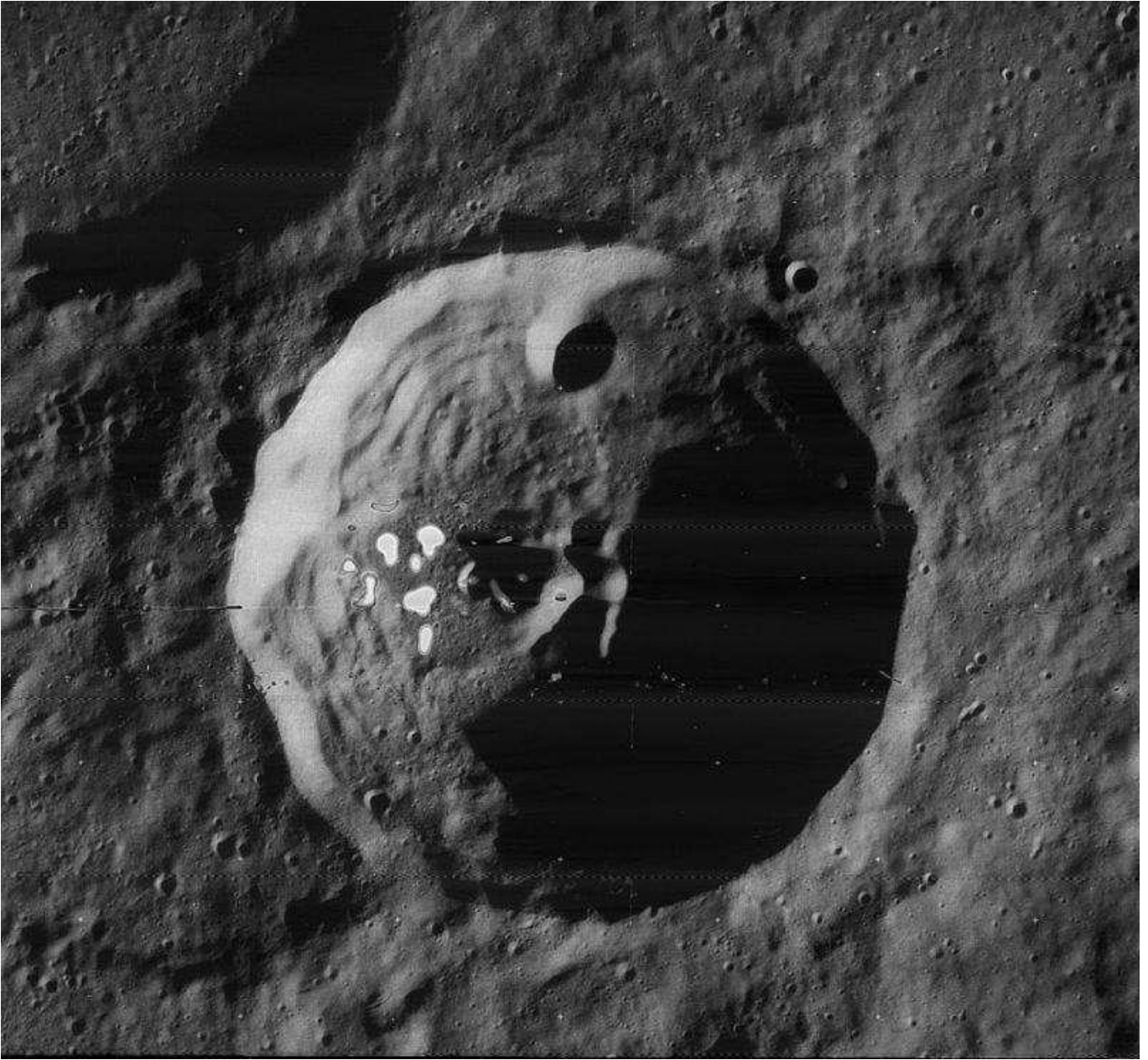
| | Latitude | Longitude | Diameter | Polarization min[1,8] | Color Index [2,7] | Albedo [3,7] | m [5,7] |
|----------|----------|-----------|----------|--------------------------|----------------------|-----------------|------------|
| Menelaus | 16.3°N | 16° E | 27 km | 1.01 | 1.19 | 14.20 | 13.50 |

80. Apollo 16 landing area



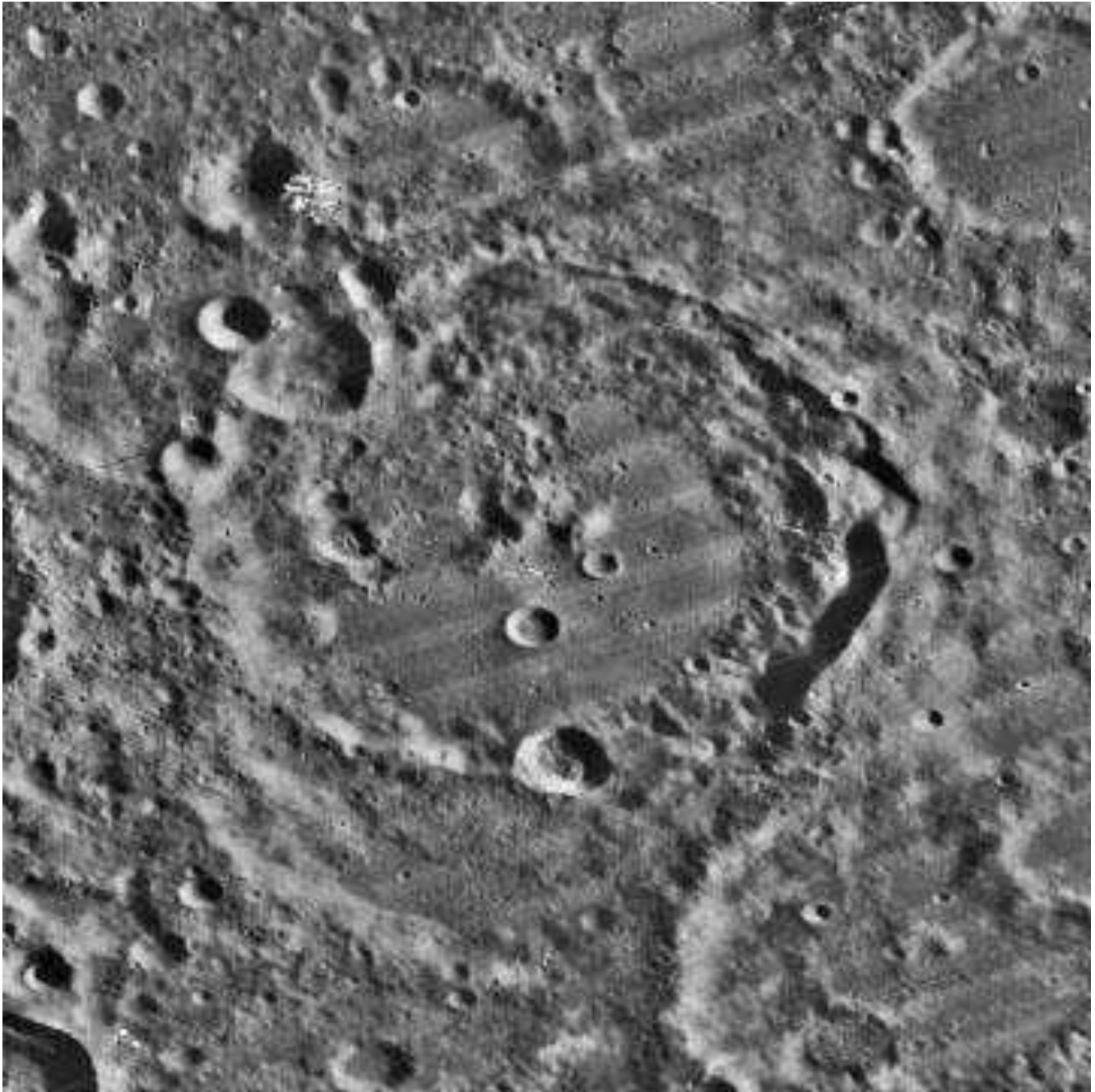
| | Latitude | Longitude | Diameter | Polarization min[1,8] | Color Index [2,7] | Albedo [3,7] | m [5,7] |
|---------------------------|----------|-----------|----------|--------------------------|----------------------|-----------------|------------|
| Apollo 16 landing area | 8.97° S | 15.5° E | 28 km | 1.16 | 1.20 | 12.40 | 12.50 |

81. Scoresby



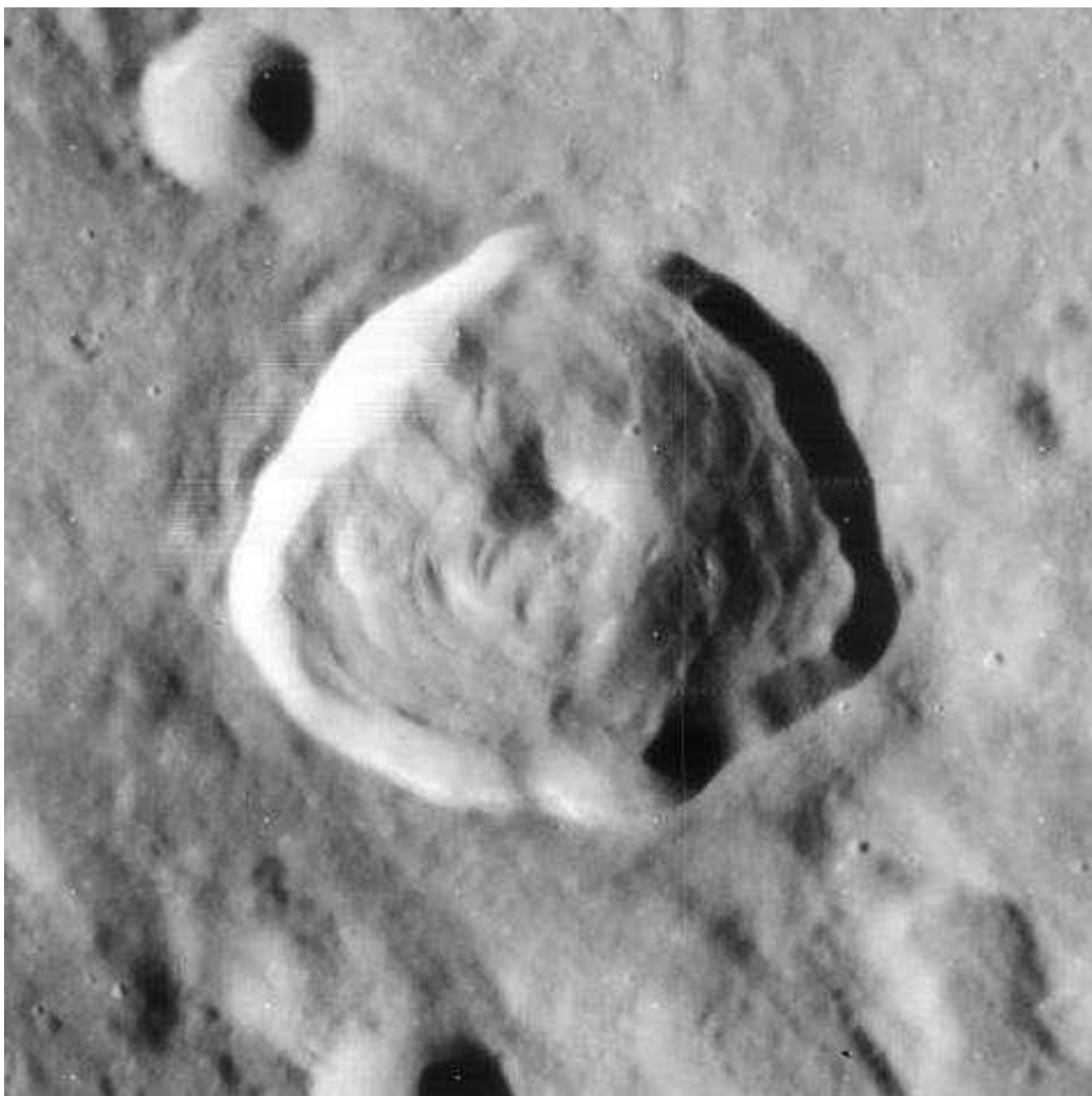
| | Latitude | Longitude | Diameter | Polarization min[1,8] | Color Index [2,7] | Albedo [3,7] | m [5,7] |
|----------|----------|-----------|----------|--------------------------|----------------------|-----------------|------------|
| Scoresby | 77.7° N | 14.1° E | 56 km | 0.97 | 1.22 | 20.20 | 16.90 |

82. Maurolycus



| | Latitude | Longitude | Diameter | Polarization min[1,8] | Color Index [2,7] | Albedo [3,7] | m [5,7] |
|------------|----------|-----------|----------|--------------------------|----------------------|-----------------|------------|
| Maurolycus | 41.8° S | 14° E | 114 km | 1.30 | 1.24 | 17.20 | 17.30 |

83. Godin



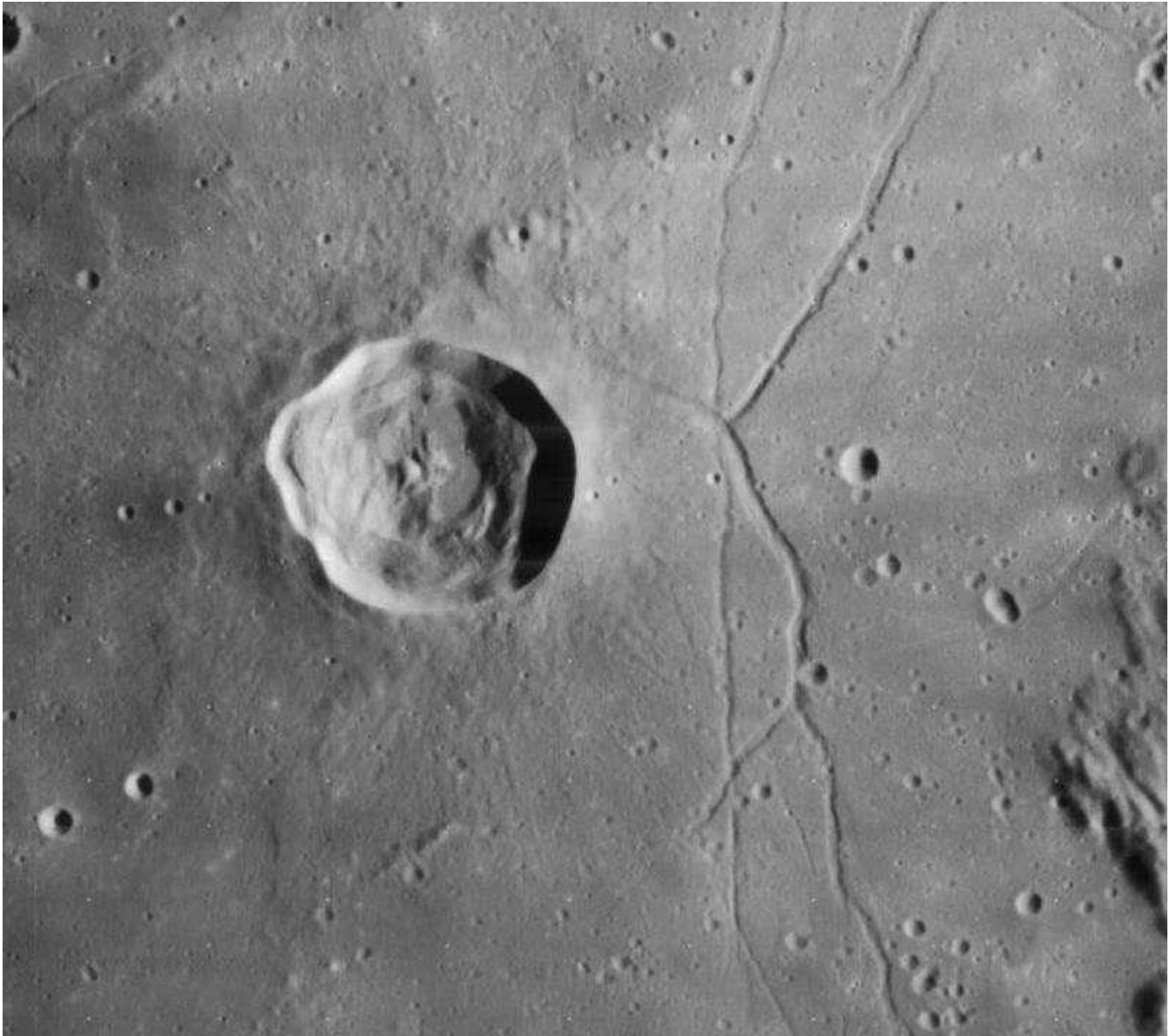
| | Latitude | Longitude | Diameter | Polarization min[1,8] | Color Index [2,7] | Albedo [3,7] | m [5,7] |
|-------|----------|-----------|----------|--------------------------|----------------------|-----------------|------------|
| Godin | 1.8° N | 10.2° E | 35 km | 0.97 | 1.19 | 15.20 | 15.70 |

84. Manilius



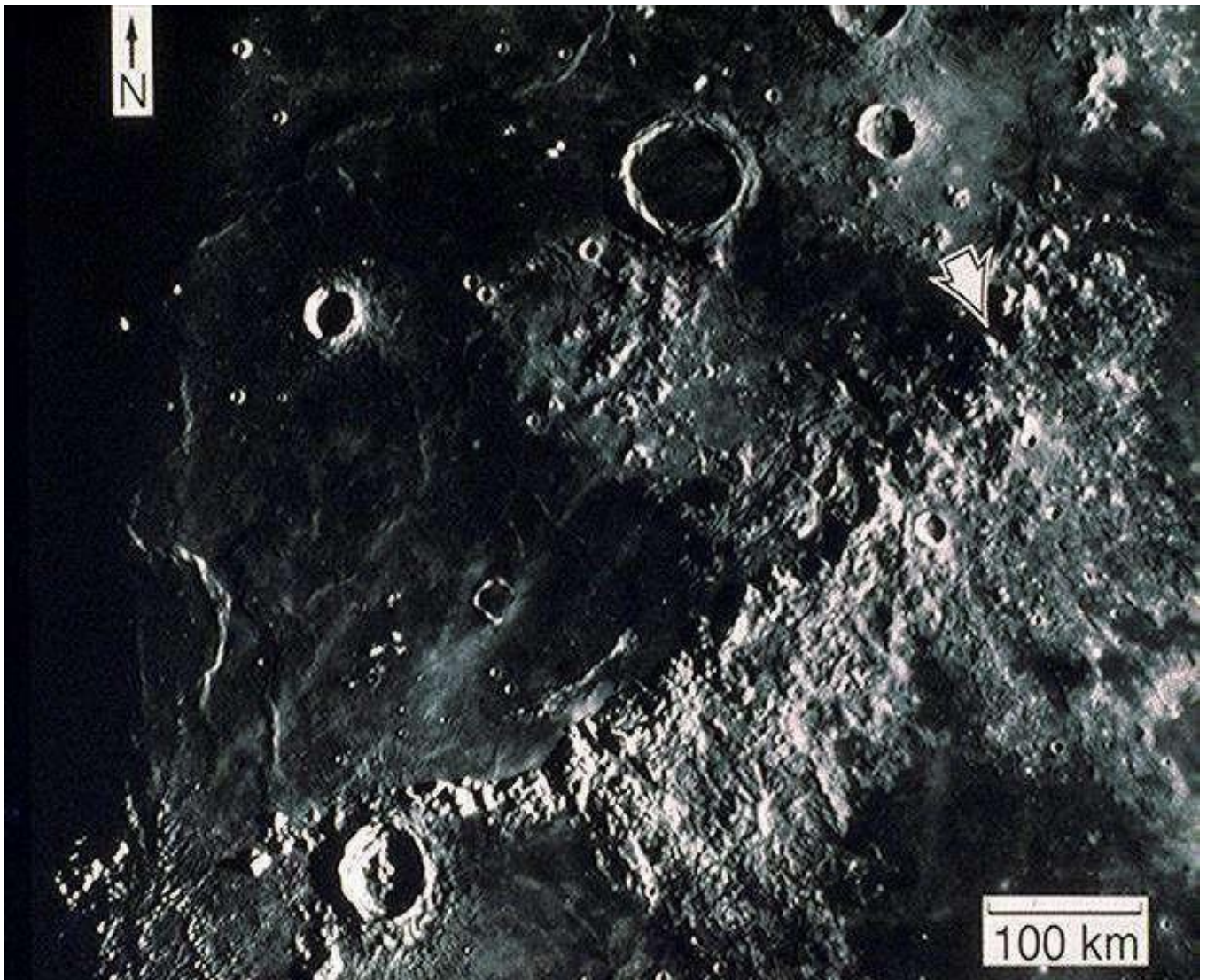
| | Latitude | Longitude | Diameter | Polarization min[1,8] | Color Index [2,7] | Albedo [3,7] | m [5,7] |
|----------|----------|-----------|----------|--------------------------|----------------------|-----------------|------------|
| Manilius | 14.5° N | 9.1° E | 39 km | 1.10 | 1.21 | 15.20 | 13.50 |

85. Triesnecker



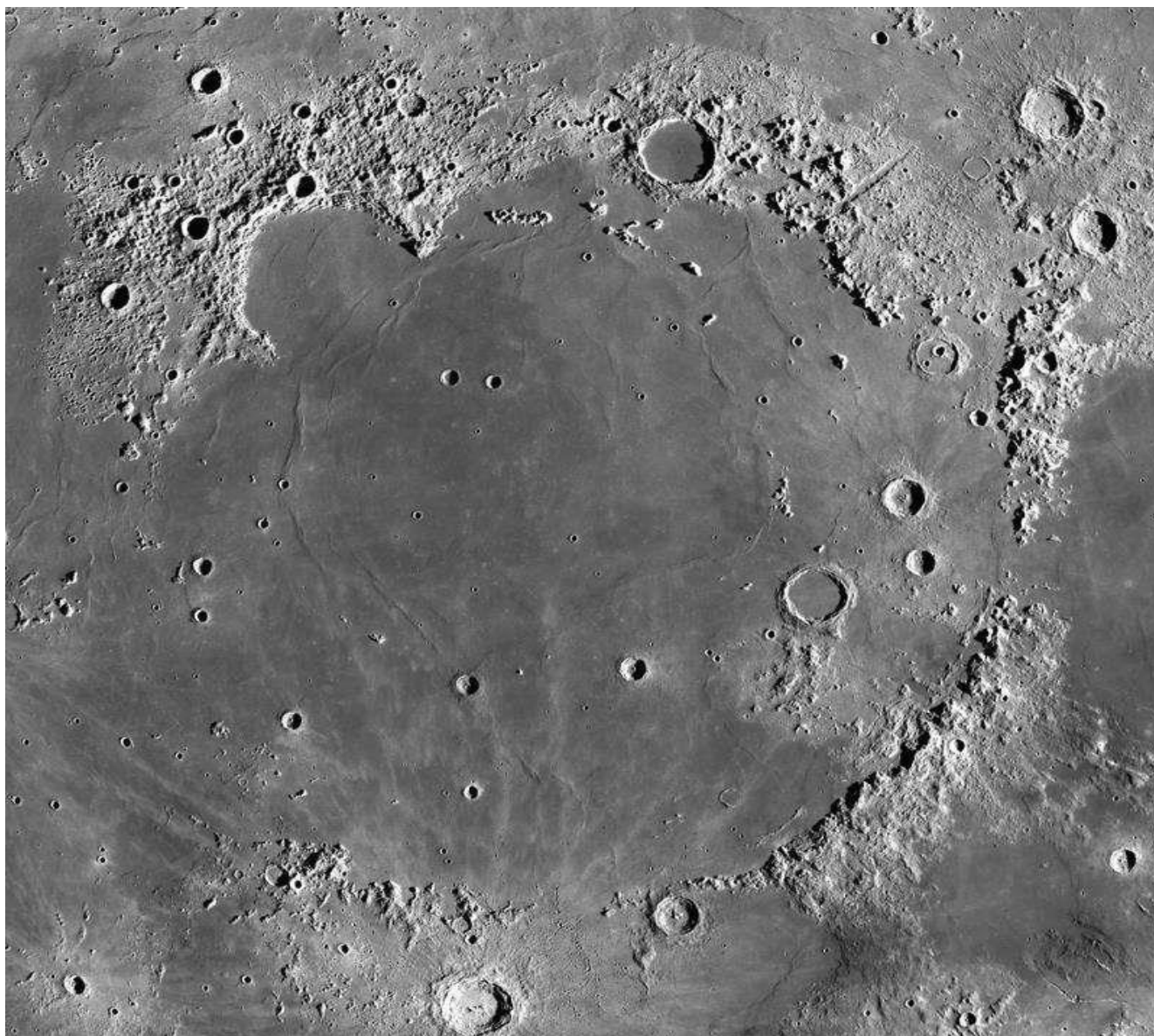
| | Latitude | Longitude | Diameter | Polarization min[1,8] | Color Index [2,7] | Albedo [3,7] | m [5,7] |
|-------------|----------|-----------|----------|--------------------------|----------------------|-----------------|------------|
| Triesnecker | 4.18° N | 3.6° E | 26 km | 1.06 | 1.17 | 17.20 | 14.10 |

86. Apollo 15 landing area



| | Latitude | Longitude | Diameter | Polarization min[1,8] | Color Index [2,7] | Albedo [3,7] | m [5,7] |
|---------------------------|----------|-----------|----------|--------------------------|----------------------|-----------------|------------|
| Apollo 15 landing area | 26.13° N | 3.63° E | 12 km | 1.11 | 1.20 | 16.20 | 8.90 |

87. Mare Imbrium



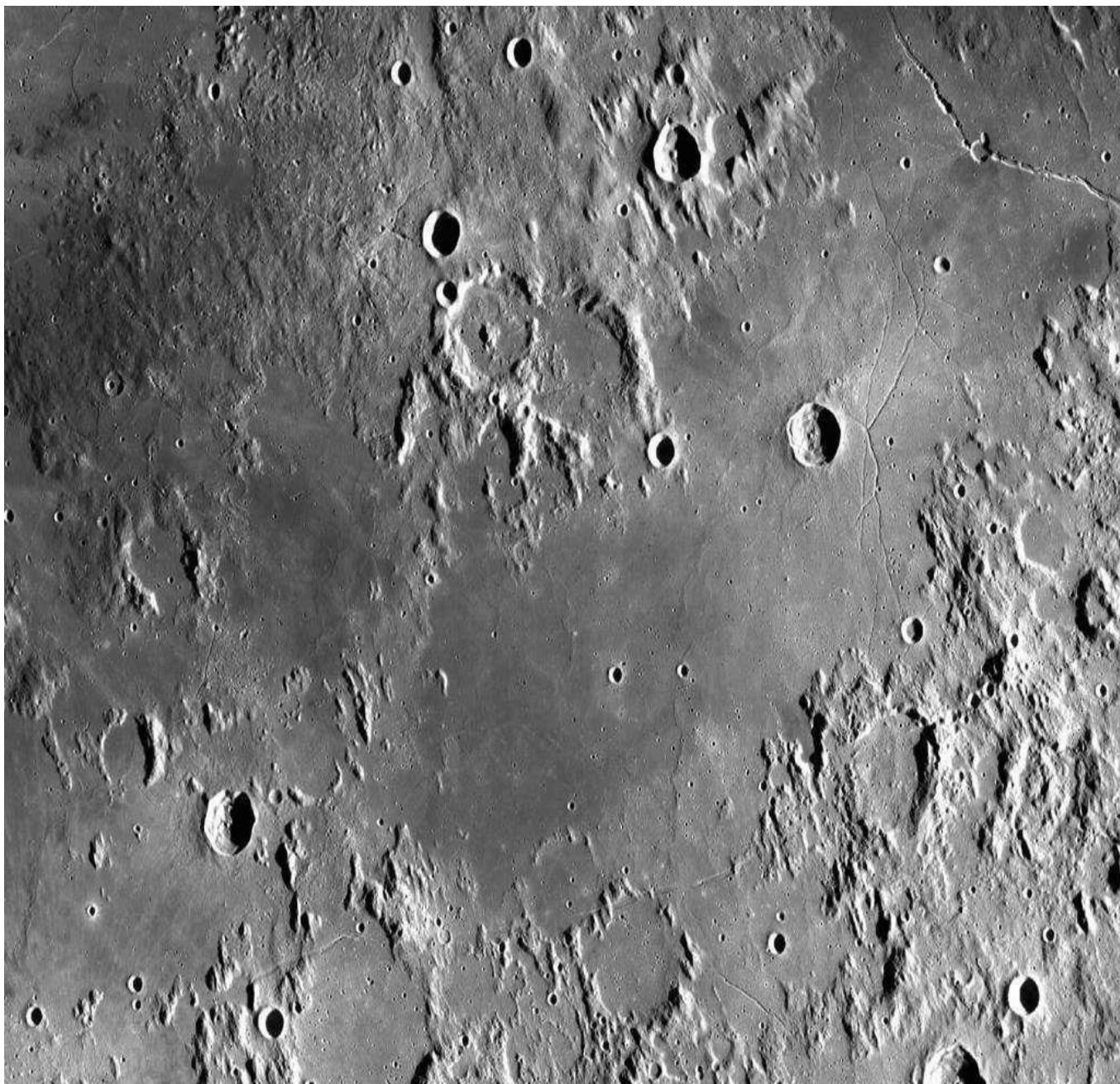
| | Latitude | Longitude | Diameter | Polarization min[1,8] | Color Index [2,7] | Albedo [3,7] | m [5,7] |
|--------------|----------|-----------|----------|--------------------------|----------------------|-----------------|------------|
| Mare Imbrium | 32.8° N | 15.6° W | 1145 km | 1.07 | 1.20 | 7.80 | 10.20 |

88. Autolycus



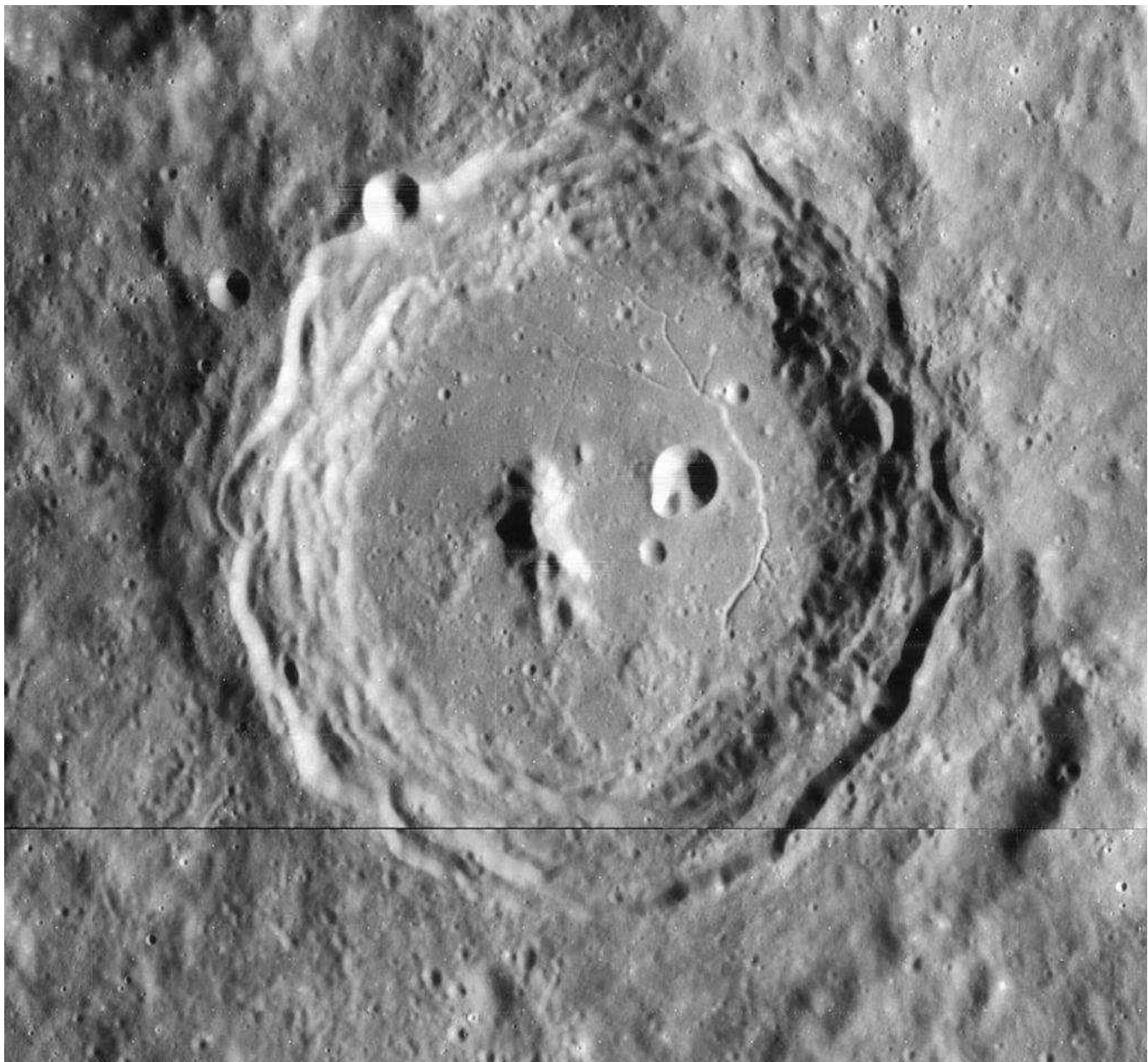
| | Latitude | Longitude | Diameter | Polarization | | Color Index [2,7] | Albedo [3,7] | m [5,7] |
|-----------|----------|-----------|----------|-------------------|------------------|----------------------|-----------------|------------|
| Autolycus | 30.7° N | 1.5° E | 39 km | 1.20 min [1,8] | 9.0 max [4,8] | 1.22 | 12.40 | 11.40 |

89. Sinus Medii



| | Latitude | Longitude | Diameter | Polarization min[1,8] | Color Index [2,7] | Albedo [3,7] | m [5,7] |
|-------------|----------|-----------|----------|--------------------------|----------------------|-----------------|------------|
| Sinus Medii | 2.4° N | 1.7° E | 335 km | 1.23 | 1.18 | 10.90 | 11.70 |

90. Arzachel



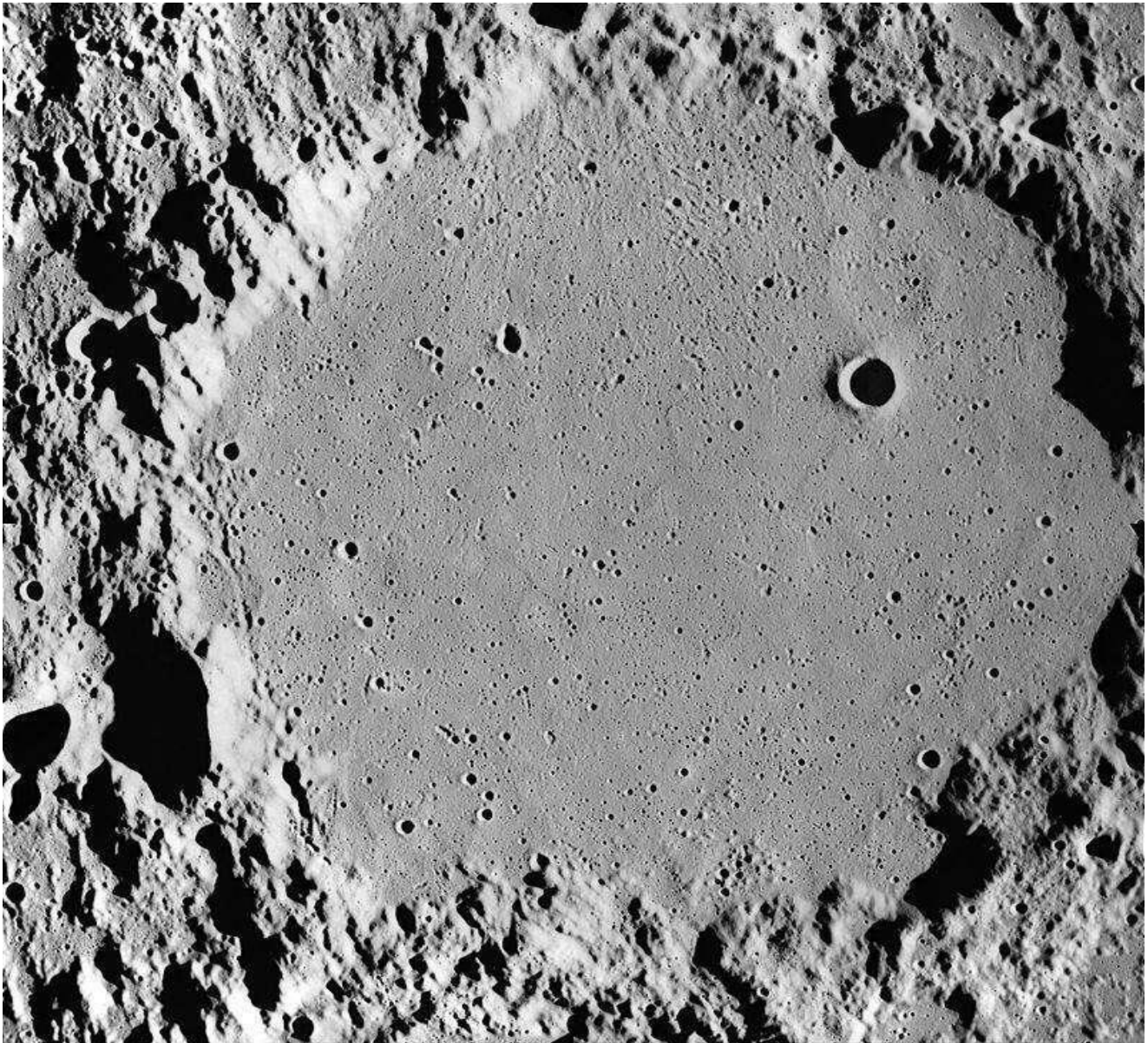
| | Latitude | Longitude | Diameter | Polarization min [1,8] | Color Index [2,7] | Albedo [3,7] | m [5,7] |
|----------|----------|-----------|----------|---------------------------|----------------------|-----------------|------------|
| Arzachel | 18.2° S | 1.9° W | 96 km | 1.10 | 1.24 | 14.20 | 15.70 |

91. Purbach



| | Latitude | Longitude | Diameter | Polarization min[1,8] | Color Index [2,7] | Albedo [3,7] | m [5,7] |
|---------|----------|-----------|----------|--------------------------|----------------------|-----------------|------------|
| Purbach | 25.5° S | 1.9° W | 118 km | 1.16 | 1.22 | 13.30 | 13.50 |

92. Ptolemaeus



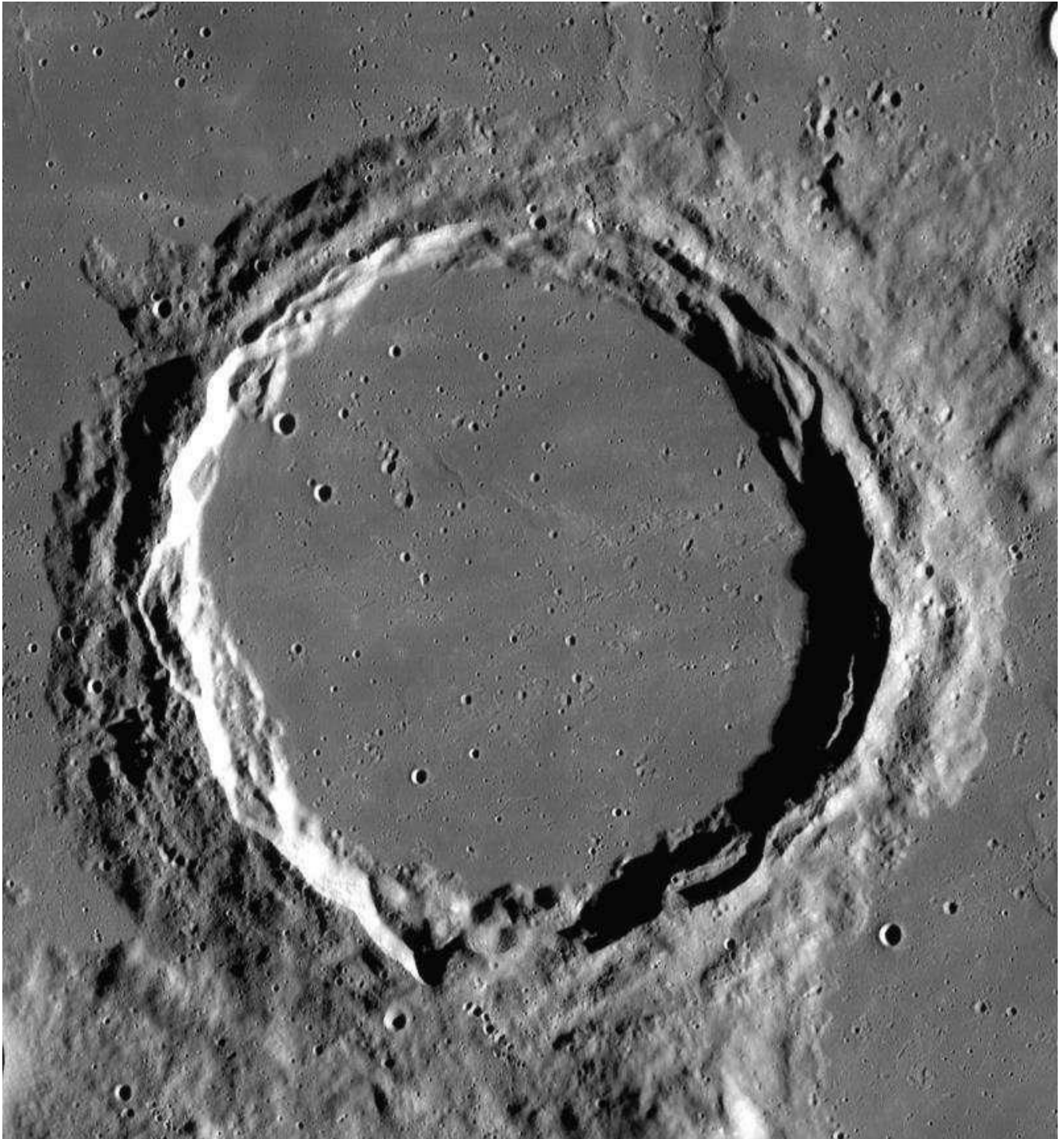
| | Latitude | Longitude | Diameter | Polarization | | Color Index [2,7] | Albedo [3,7] | m [5,7] |
|------------|----------|-----------|----------|-------------------|-------------------|----------------------|-----------------|------------|
| Ptolemaeus | 9.2° S | 1.8° W | 153 km | 1.17 min [1,8] | 9.30 max [4,8] | 1.21 | 13.30 | 12.50 |

93. Alphonsus



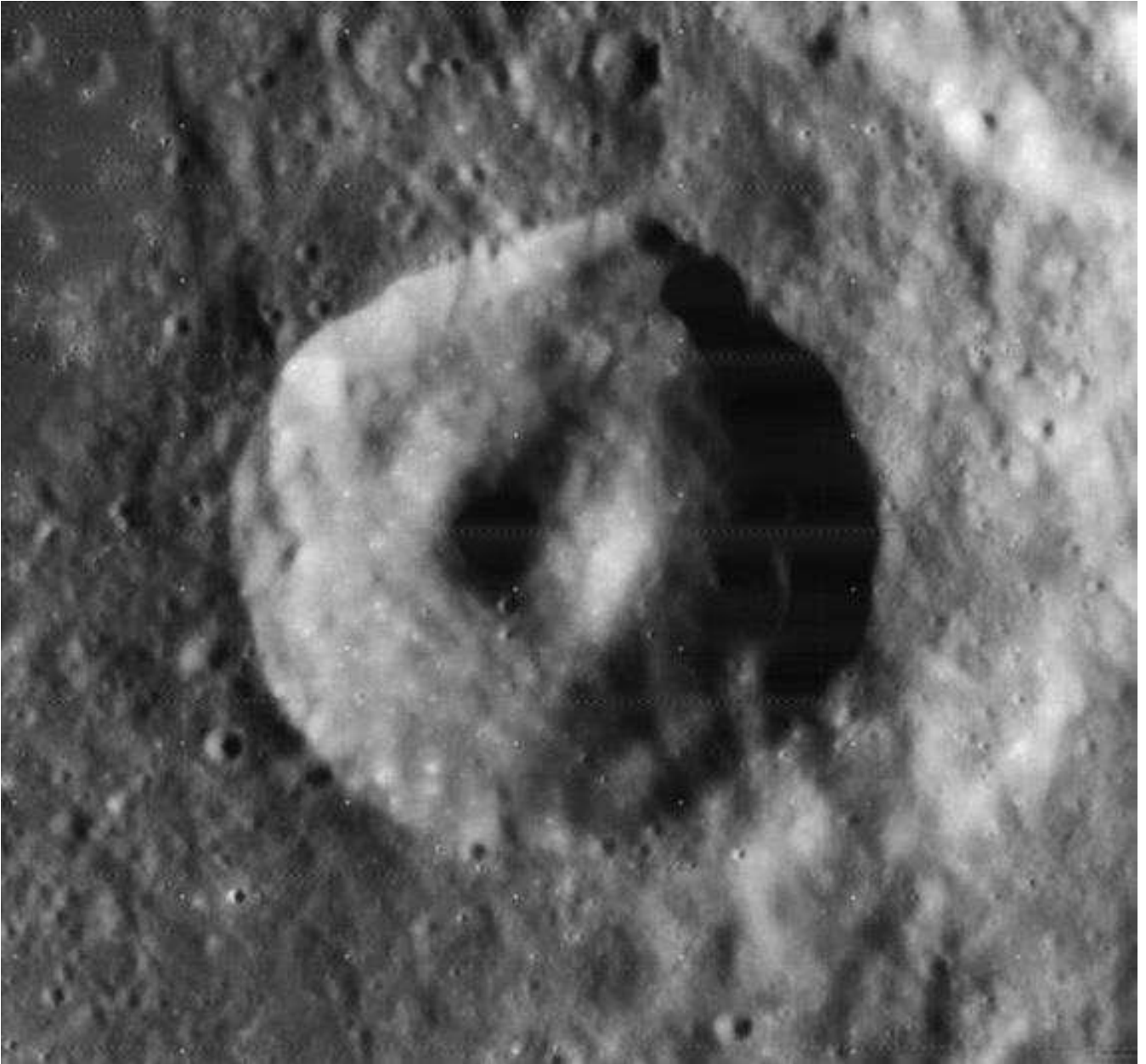
| | Latitude | Longitude | Diameter | Polarization | | Color Index [2,7] | Albedo [3,7] | m [5,7] |
|-----------|----------|-----------|----------|-------------------|-------------------|----------------------|-----------------|------------|
| Alphonsus | 13.4° S | 2.8° W | 119 km | 1.11 min [1,8] | 6.60 max [4,8] | 1.24 | 14.20 | 14.10 |

94. Archimedes



| | Latitude | Longitude | Diameter | Polarization | | Color Index [2,7] | Albedo [3,7] | m [5,7] |
|------------|----------|-----------|----------|-------------------|-------------------|----------------------|-----------------|------------|
| Archimedes | 29.7° N | 4° W | 83 km | 1.20 min [1,8] | 9.10 max [4,8] | 1.20 | 10.30 | 10.20 |

95. Alpetragius



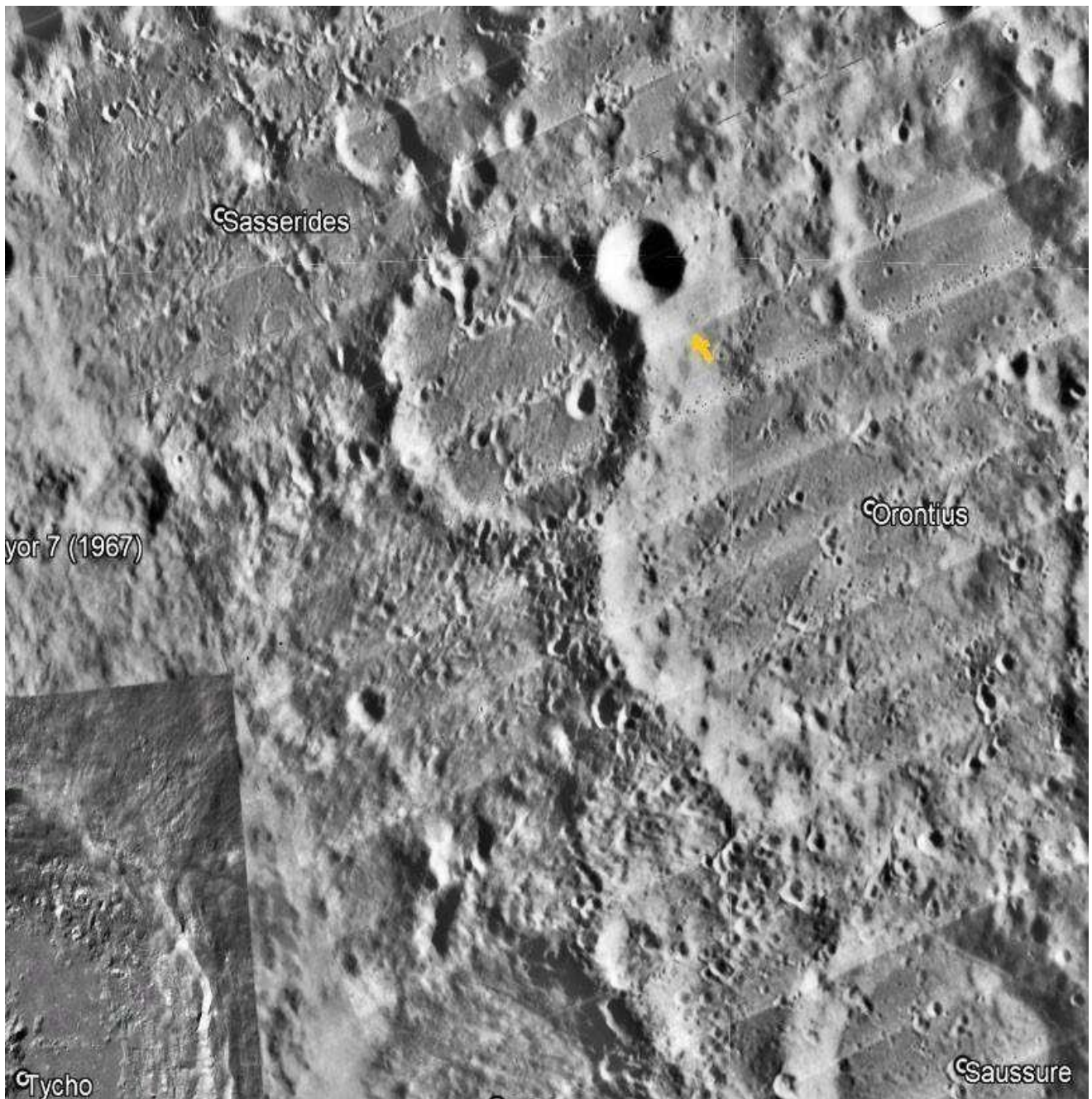
| | Latitude | Longitude | Diameter | Polarization min[1,8] | Color Index [2,7] | Albedo [3,7] | m [5,7] |
|-------------|----------|-----------|----------|--------------------------|----------------------|-----------------|------------|
| Alpetragius | 16° S | 4.5° W | 40 km | 1.00 | 1.24 | 12.40 | 12.50 |

96. Crater East from Clavius



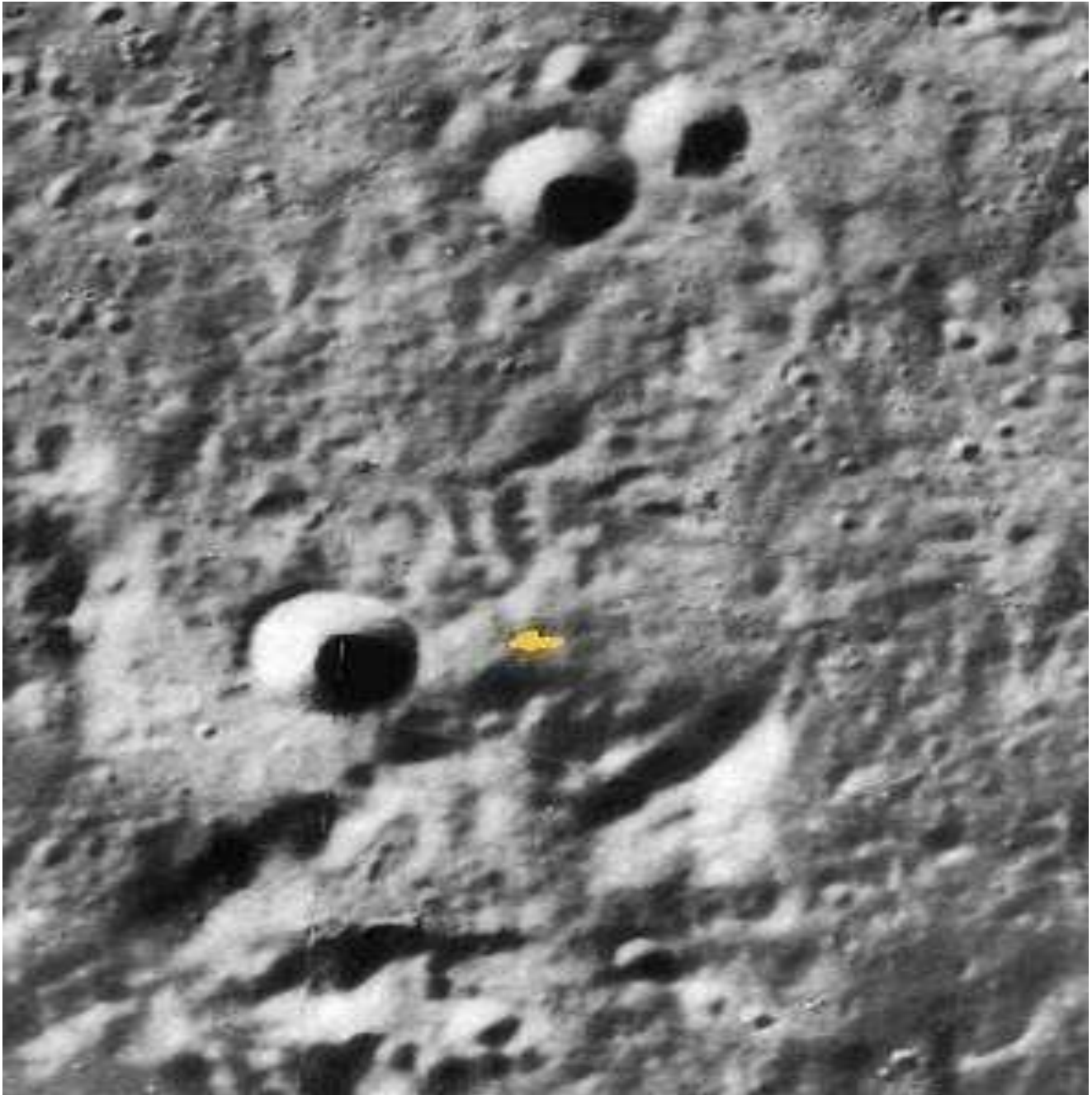
| | Latitude | Longitude | Diameter | Polarization min[1,8] | Color Index [2,7] | Albedo [3,7] | m [5,7] |
|-----------------------------|----------|-----------|----------|--------------------------|----------------------|-----------------|------------|
| Crater East from Clavius | 59°S | 5°W | 28 km | 1.12 | 1.26 | 17.20 | 17.30 |

97. Crater North from Tycho



| | Latitude | Longitude | Diameter | Polarization min[1,8] | Color Index [2,7] | Albedo [3,7] | m [5,7] |
|-------------------------|----------|-----------|----------|--------------------------|----------------------|-----------------|------------|
| Crater North from Tycho | 39.5°S | 7°W | 12 km | 0.94 | 1.20 | 20.20 | 17.30 |

98. Crater West from Timaeus



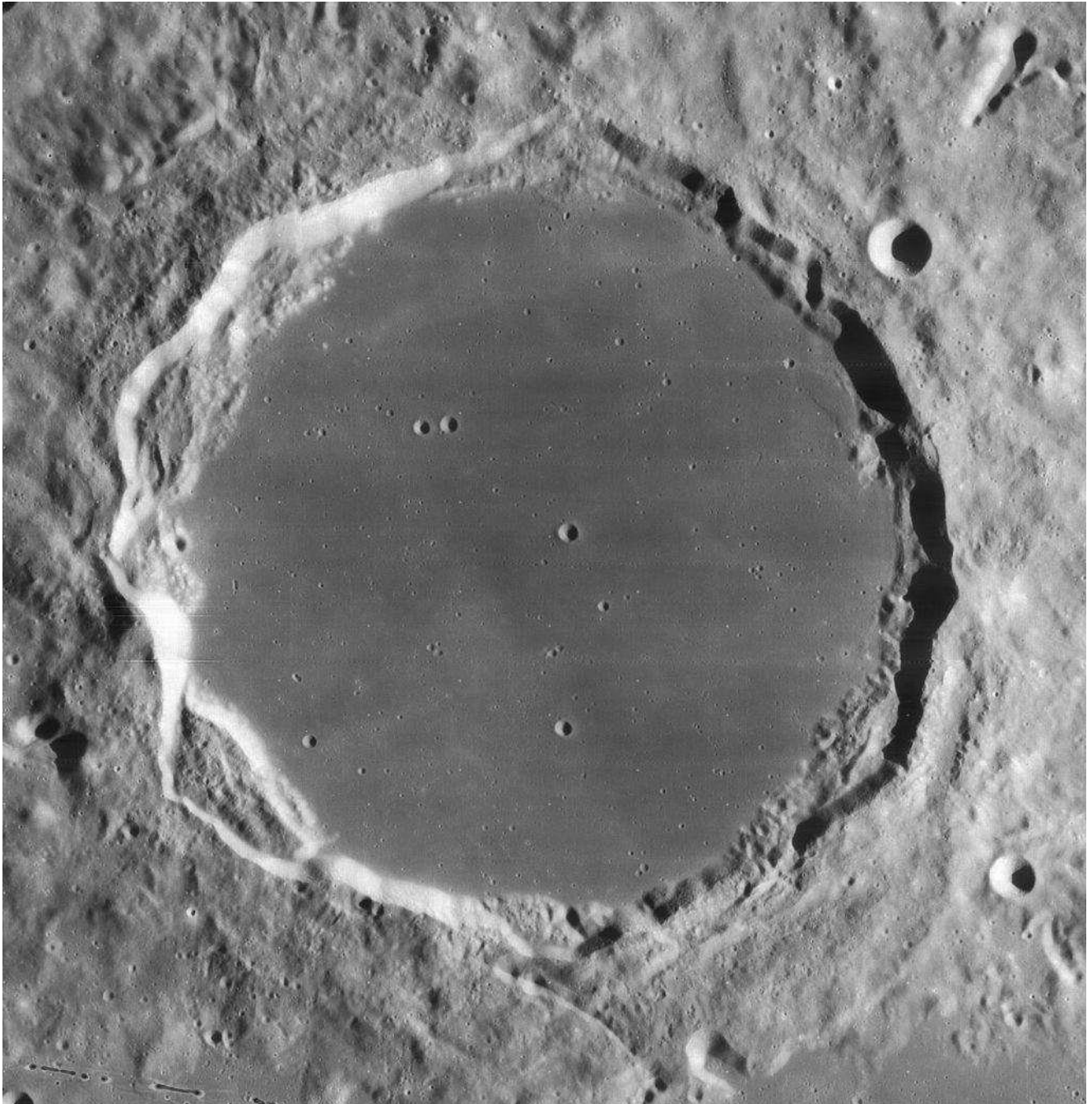
| | Latitude | Longitude | Diameter | Polarization min[1,8] | Color Index [2,7] | Albedo [3,7] | m [5,7] |
|-----------------------------|----------|-----------|----------|--------------------------|----------------------|-----------------|------------|
| Crater West from Timaeus | 63°N | 7.5°W | 28 km | 1.25 | 1.29 | 16.20 | 19.80 |

99. Crater North from Plato



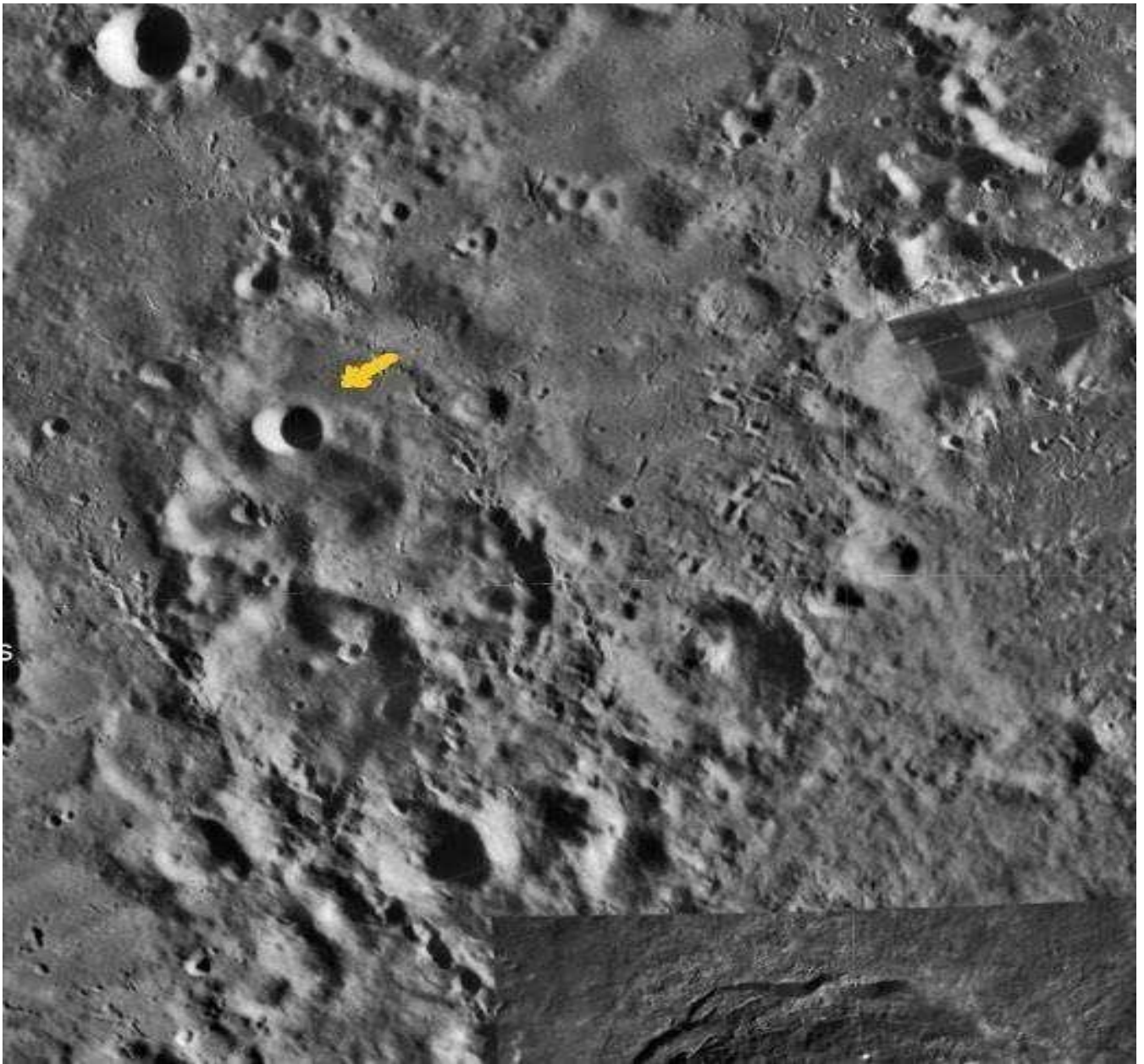
| | Latitude | Longitude | Diameter | Polarization min[1,8] | Color Index [2,7] | Albedo [3,7] | m [5,7] |
|----------------------------|----------|-----------|----------|--------------------------|----------------------|-----------------|------------|
| Crater North from Plato | 55°N | 8.3°W | 28 km | 1.37 | 1.40 | 15.20 | 13.50 |

100. Plato



| | Latitude | Longitude | Diameter | Polarization | | Color Index [2,7] | Albedo [3,7] | m [5,7] |
|-------|----------|-----------|----------|-------------------|-------------------|----------------------|-----------------|------------|
| Plato | 51.6° N | 9.3° W | 109 km | 1.16 min [1,8] | 9.00 max [4,8] | 1.38 | 12.40 | 10.20 |

101. Crater North from Tycho



| | Latitude | Longitude | Diameter | Polarization min[1,8] | Color Index [2,7] | Albedo [3,7] | m [5,7] |
|----------------------------|----------|-----------|----------|--------------------------|----------------------|-----------------|------------|
| Crater North from Tycho | 41.5°S | 10°W | 12 km | 0.75 | 1.22 | 18.50 | 9.70 |

102. Anaxagoras



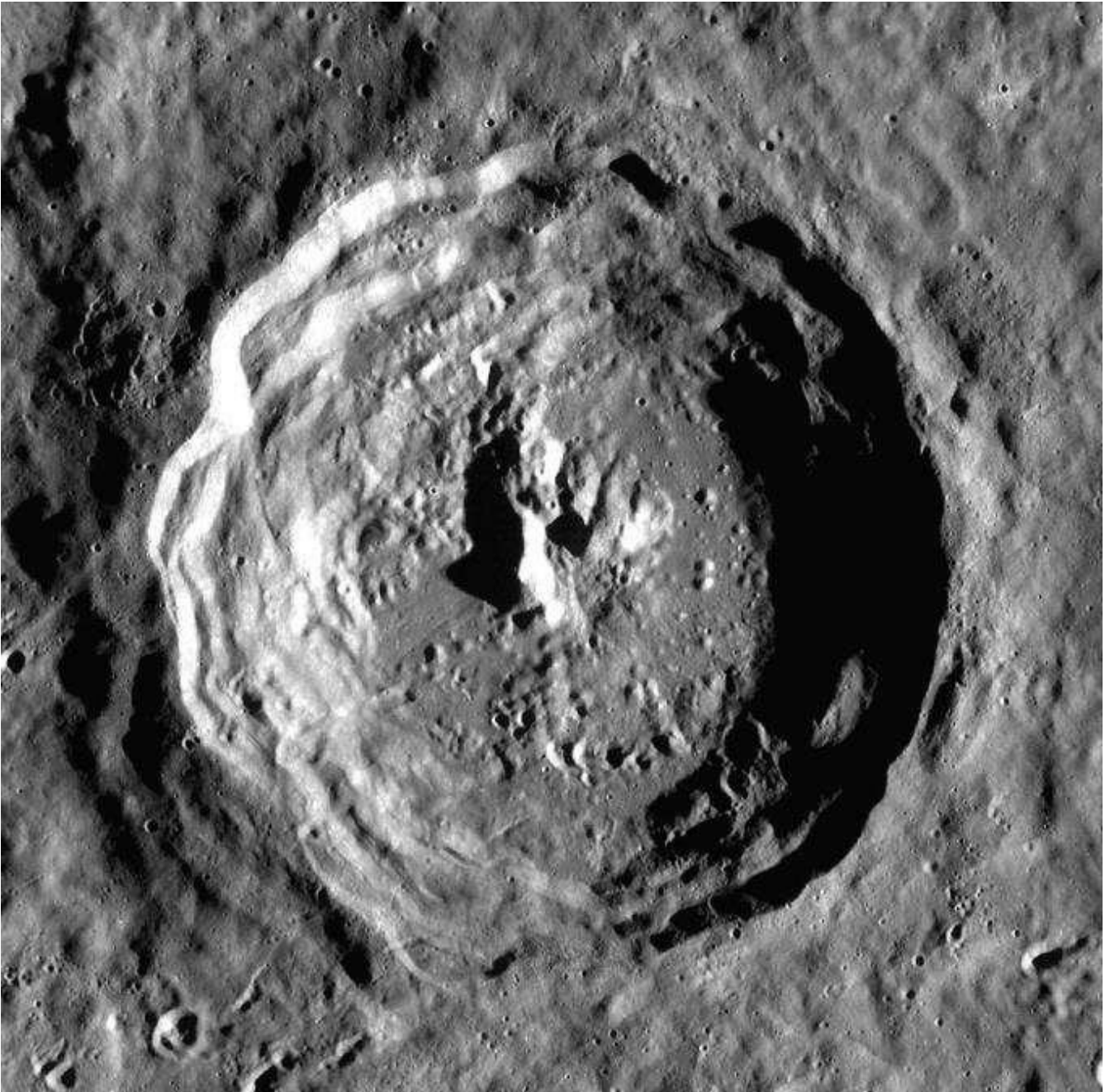
| | Latitude | Longitude | Diameter | Polarization min[1,8] | Color Index [2,7] | Albedo [3,7] | m [5,7] |
|------------|----------|-----------|----------|--------------------------|----------------------|-----------------|------------|
| Anaxagoras | 73.48° N | 10.17° W | 51.9 km | 0.74 | 1.29 | 20.20 | 17.30 |

103. Crater East from Guericke



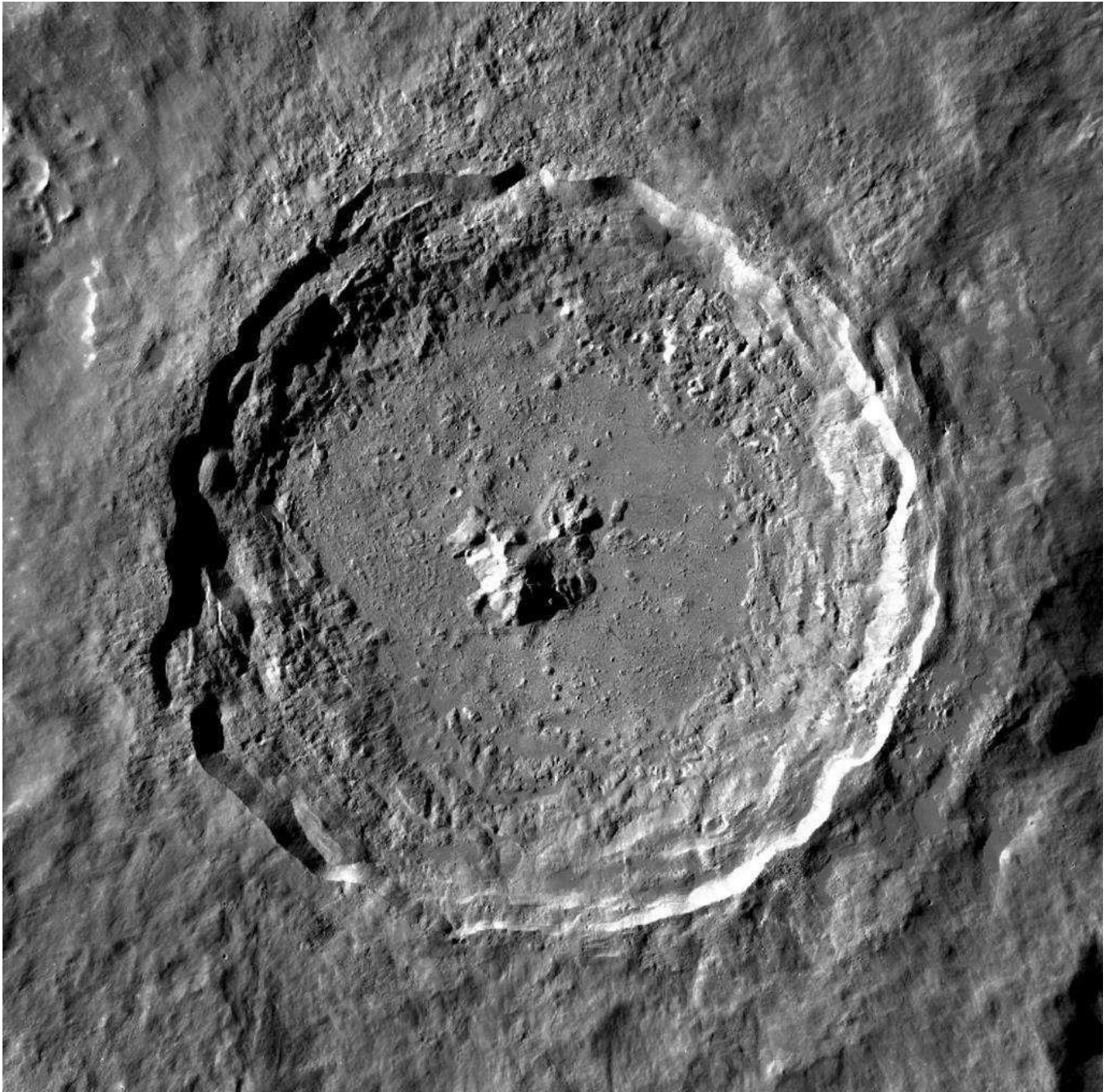
| | Latitude | Longitude | Diameter | Polarization min[1,8] | Color Index [2,7] | Albedo [3,7] | m [5,7] |
|------------------------------|----------|-----------|----------|--------------------------|----------------------|-----------------|------------|
| Crater East from Guericke | 10.3°S | 11°W | 28 km | 1.20 | 1.15 | 8.40 | 9.70 |

104. Eratosthenes



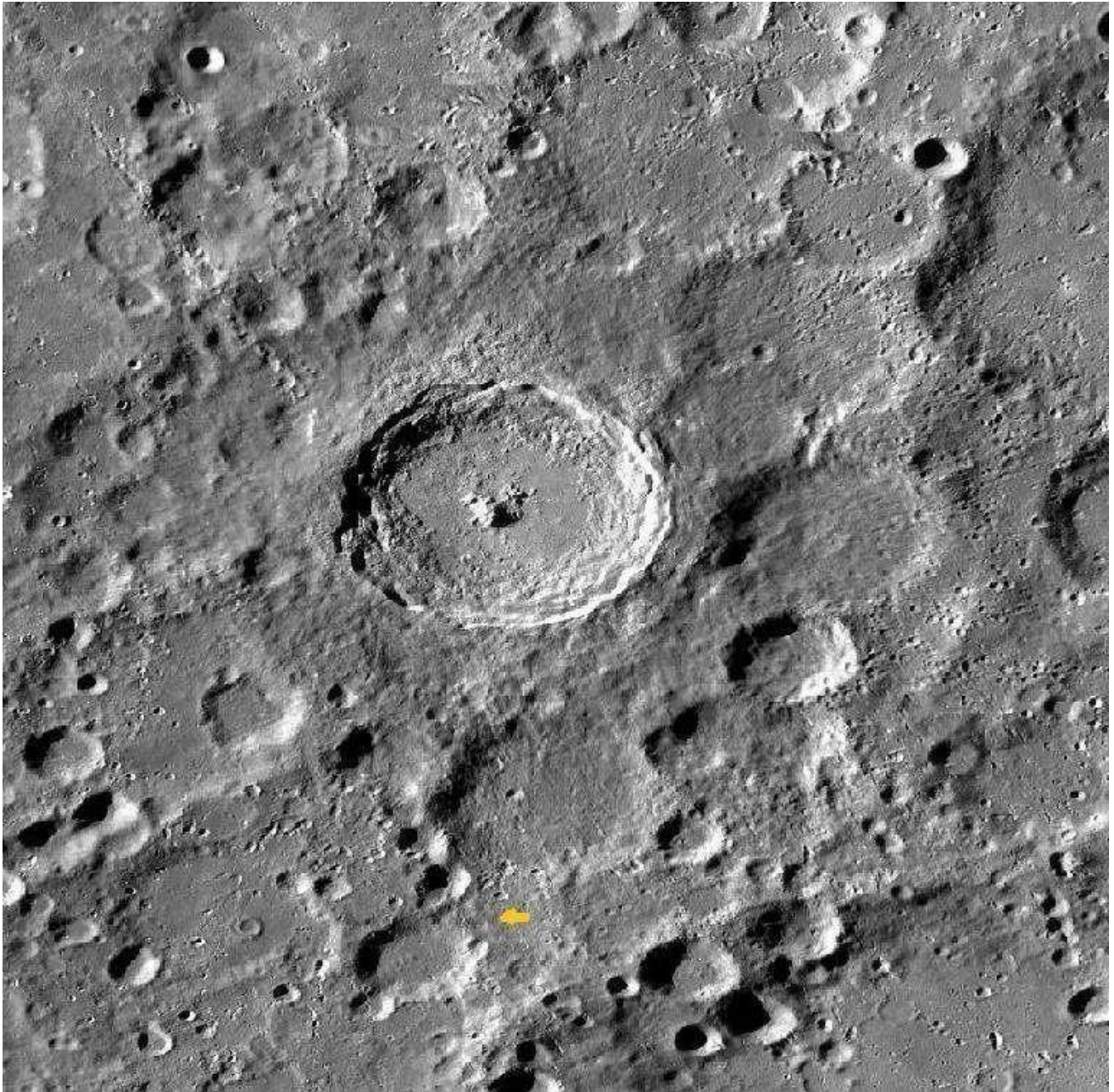
| | Latitude | Longitude | Diameter | Polarization min[1,8] | Color Index [2,7] | Albedo [3,7] | m [5,7] |
|--------------|----------|-----------|----------|--------------------------|----------------------|-----------------|------------|
| Eratosthenes | 14.47° N | 11.32° W | 59 km | 1.00 | 1.20 | 11.60 | 11.40 |

105. Tycho



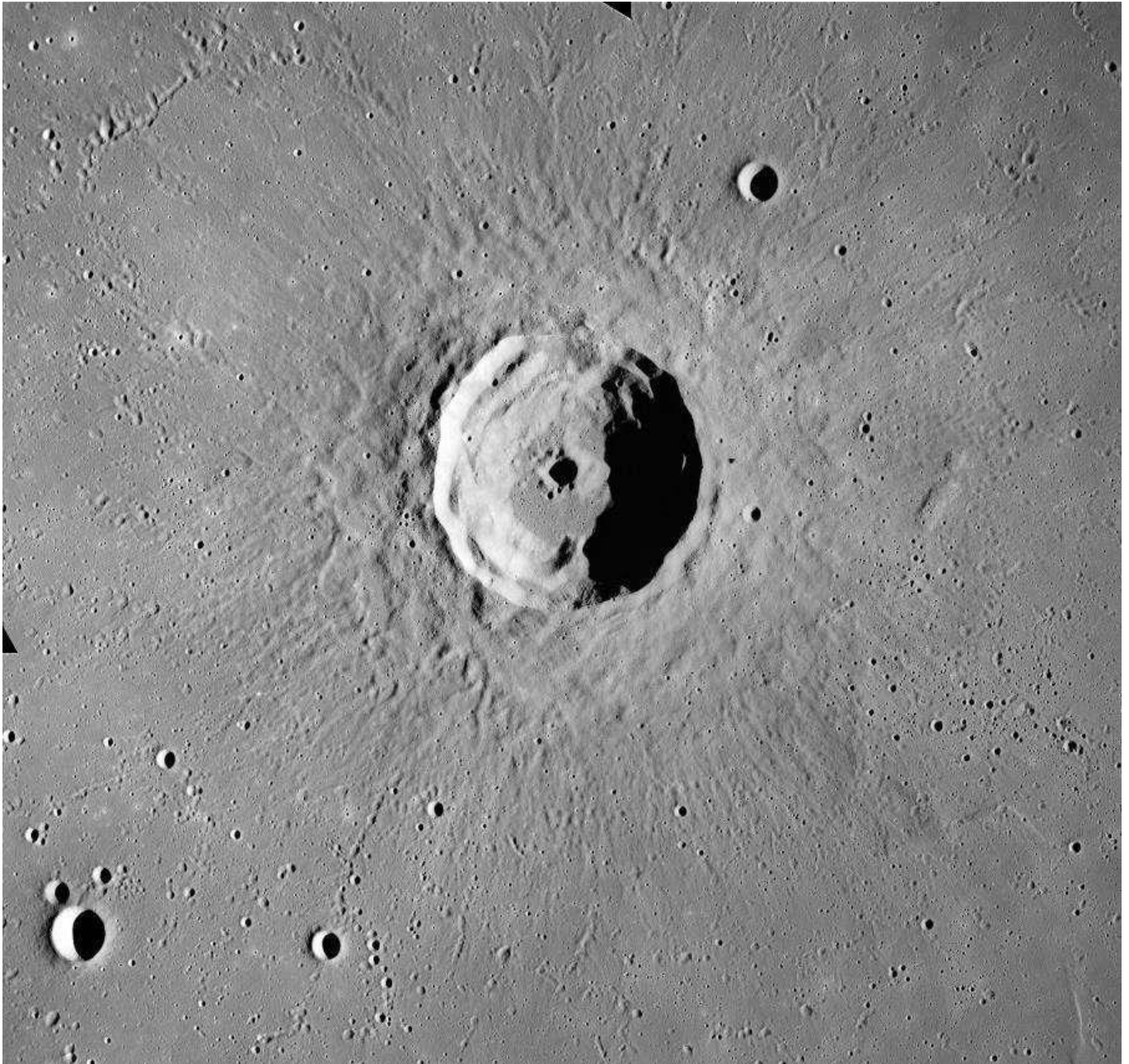
| | Latitude | Longitude | Diameter | Polarization | | Color Index [2,7] | Albedo [3,7] | m [5,7] |
|-------|----------|-----------|----------|-------------------|------------------|----------------------|-----------------|------------|
| Tycho | 43.31° S | 11.36° W | 86 km | 0.60 min [1,8] | 9.0 max [4,8] | 1.22 | 15.20 | 18.60 |

106. Crater South from Tycho



| | Latitude | Longitude | Diameter | Polarization min[1,8] | Color Index [2,7] | Albedo [3,7] | m [5,7] |
|----------------------------|----------|-----------|----------|--------------------------|----------------------|-----------------|------------|
| Crater South from Tycho | 46°S | 11.5°W | 12 km | 0.86 | 1.24 | 20.20 | 16.90 |

107. Timocharis



| | Latitude | Longitude | Diameter | Polarization min[1,8] | Color Index [2,7] | Albedo [3,7] | m [5,7] |
|------------|----------|-----------|----------|--------------------------|----------------------|-----------------|------------|
| Timocharis | 26.7° N | 13.1° W | 34.1 km | 1.20 | 1.22 | 9.30 | 11.40 |

108. Pitatus



| | Latitude | Longitude | Diameter | Polarization min[1,8] | Color Index [2,7] | Albedo [3,7] | m [5,7] |
|---------|----------|-----------|----------|--------------------------|----------------------|-----------------|------------|
| Pitatus | 29.8° S | 13.5° W | 34.1 km | 1.18 | 1.20 | 11.60 | 10.20 |

109. Crater North-West from Tycho



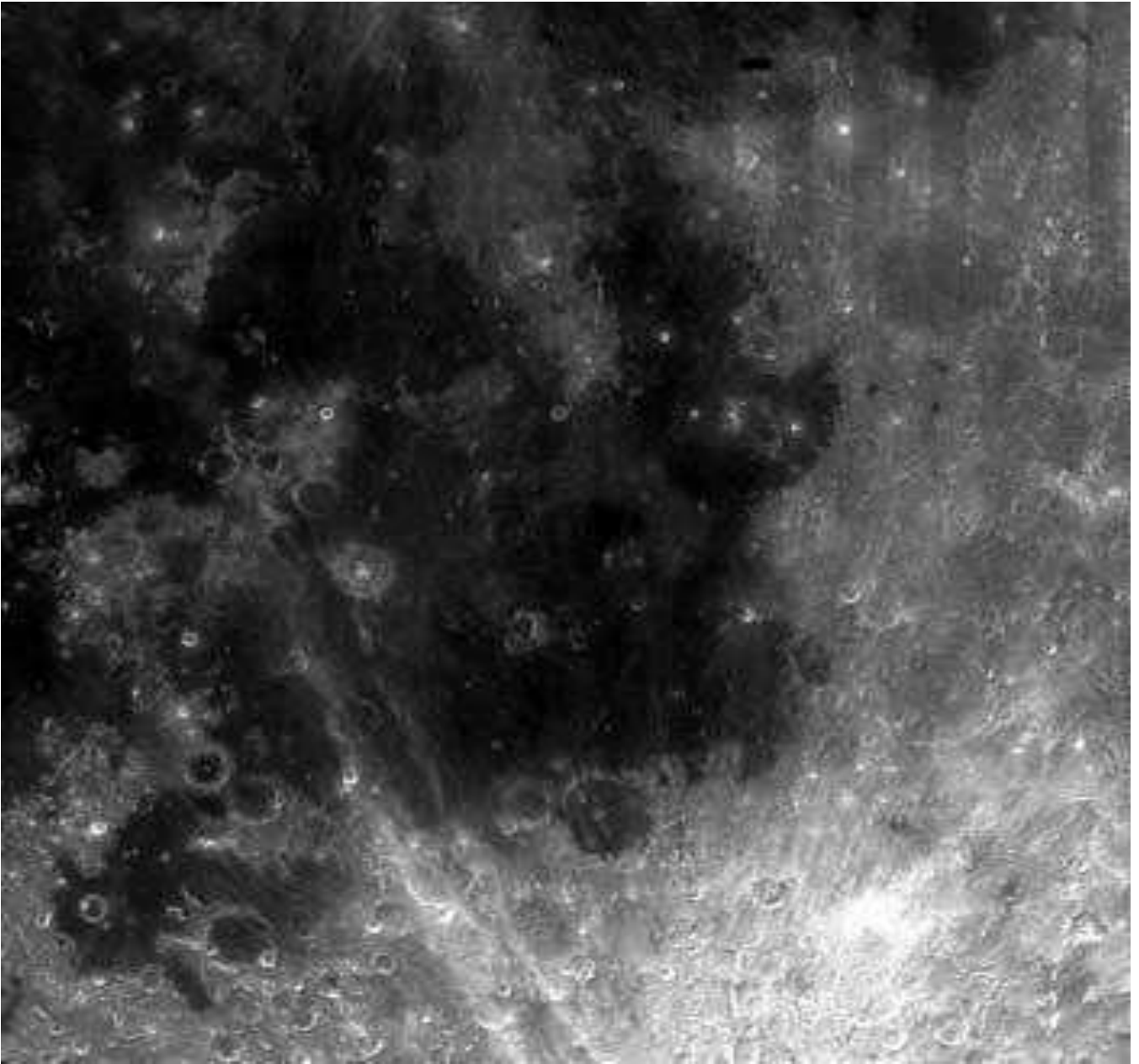
| | Latitude | Longitude | Diameter | Polarization min[1,8] | Color Index [2,7] | Albedo [3,7] | m [5,7] |
|---------------------------------|----------|-----------|----------|--------------------------|----------------------|-----------------|------------|
| Crater North-West from Tycho | 36°S | 15°W | 12 km | 1.08 | 1.24 | 20.20 | 16.90 |

110. Crater North-West from Tycho



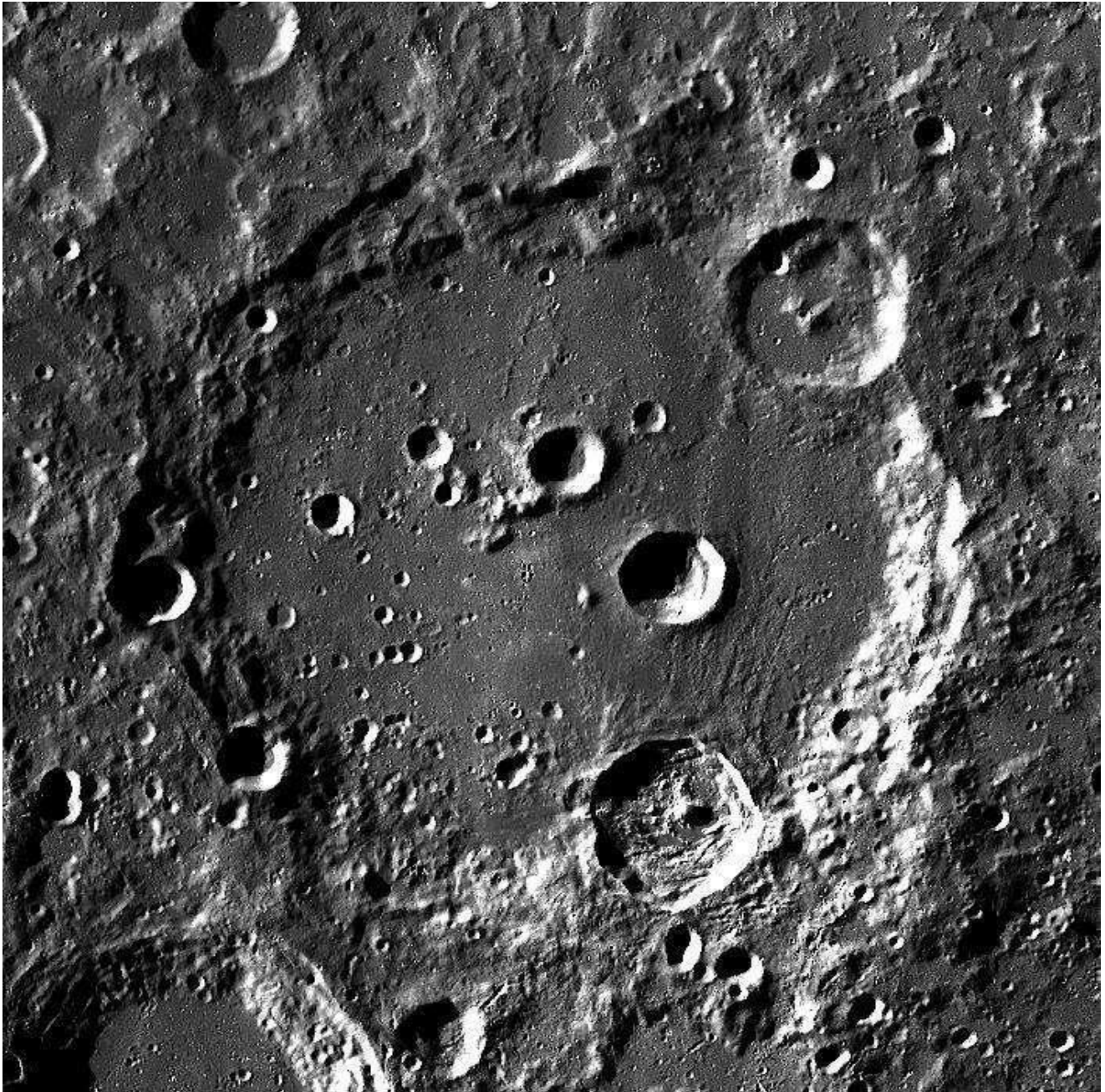
| | Latitude | Longitude | Diameter | Polarization min[1,8] | Color Index [2,7] | Albedo [3,7] | m [5,7] |
|---------------------------------|----------|-----------|----------|--------------------------|----------------------|-----------------|------------|
| Crater North-West from Tycho | 38.3°S | 16°W | 12 km | 1.08 | 1.24 | 18.50 | 15.70 |

111. Mare Nubium



| | Latitude | Longitude | Diameter | Polarization min[1,8] | Color Index [2,7] | Albedo [3,7] | m [5,7] |
|-------------|----------|-----------|----------|--------------------------|----------------------|-----------------|------------|
| Mare Nubium | 21.3° S | 16.6° W | 715 km | 0.94 | 1.24 | 8.40 | 8.90 |

112. Clavius



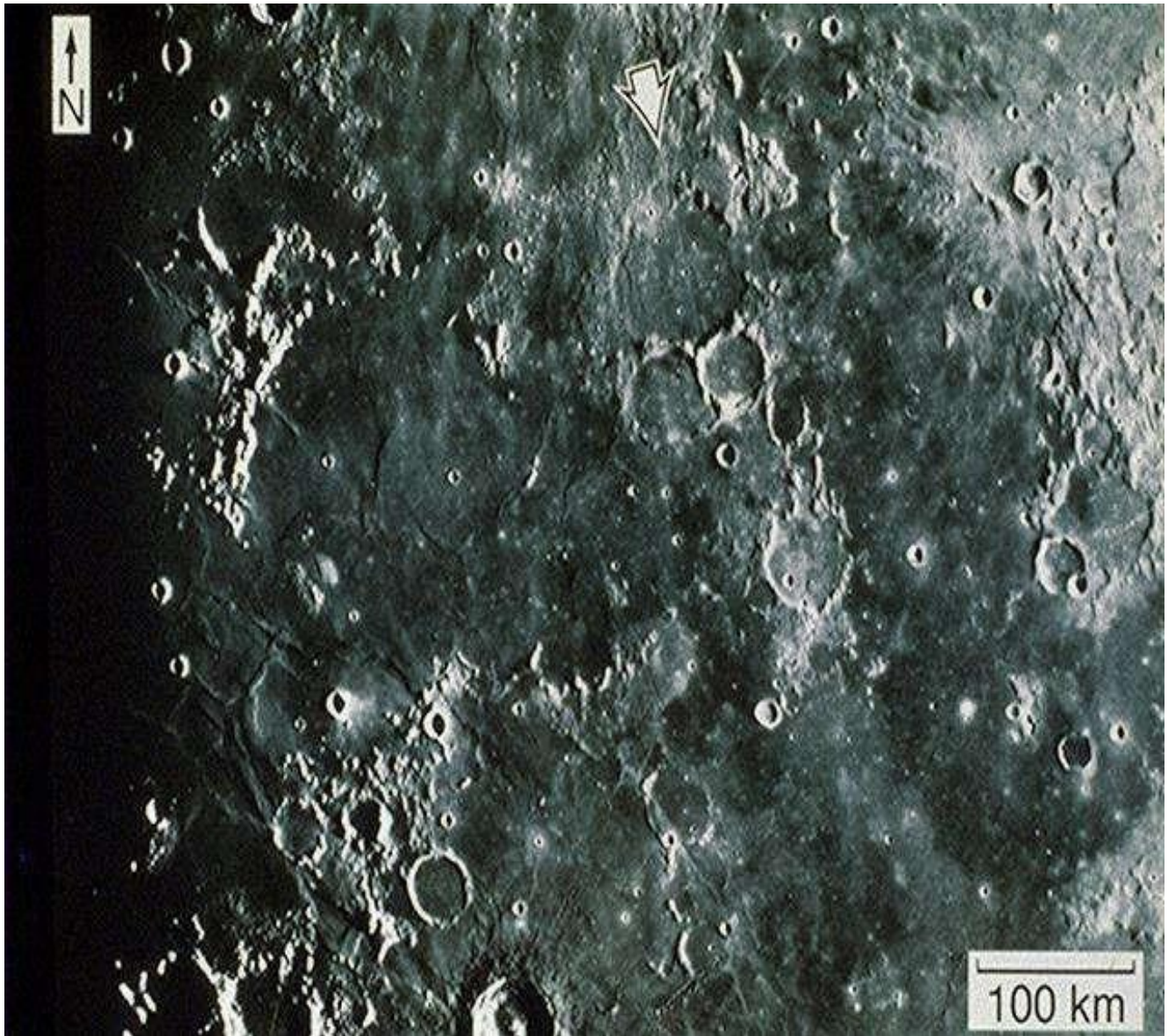
| | Latitude | Longitude | Diameter | Polarization min[1,8] | Color Index [2,7] | Albedo [3,7] | m [5,7] |
|---------|----------|-----------|----------|--------------------------|----------------------|-----------------|------------|
| Clavius | 58.4° S | 14.4° W | 231 km | 1.01 | 1.24 | 18.50 | 19.80 |

113. Fra Mauro



| | Latitude | Longitude | Diameter | Polarization min[1,8] | Color Index [2,7] | Albedo [3,7] | m [5,7] |
|-----------|----------|-----------|----------|--------------------------|----------------------|-----------------|------------|
| Fra Mauro | 6° S | 17° W | 95 km | 1.07 | 1.22 | 13.30 | 12.50 |

114. Apollo 14 landing area



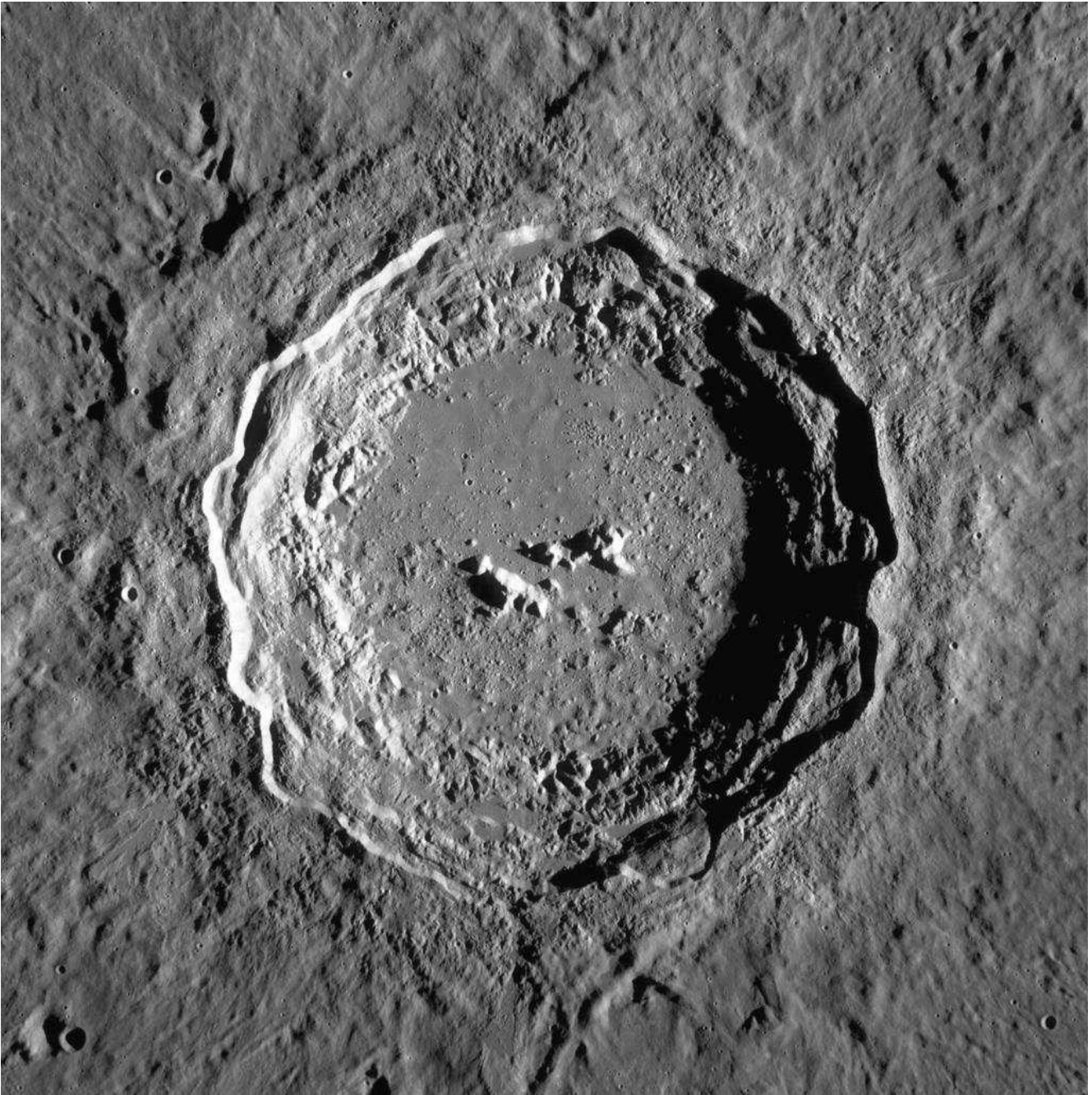
| | Latitude | Longitude | Diameter | Polarization min[1,8] | Color Index [2,7] | Albedo [3,7] | m [5,7] |
|---------------------------|----------|-----------|----------|--------------------------|----------------------|-----------------|------------|
| Apollo 14 landing area | 3.64° S | 17.47° W | 28 km | 1.10 | 1.19 | 11.60 | 12.50 |

115. Bonpland



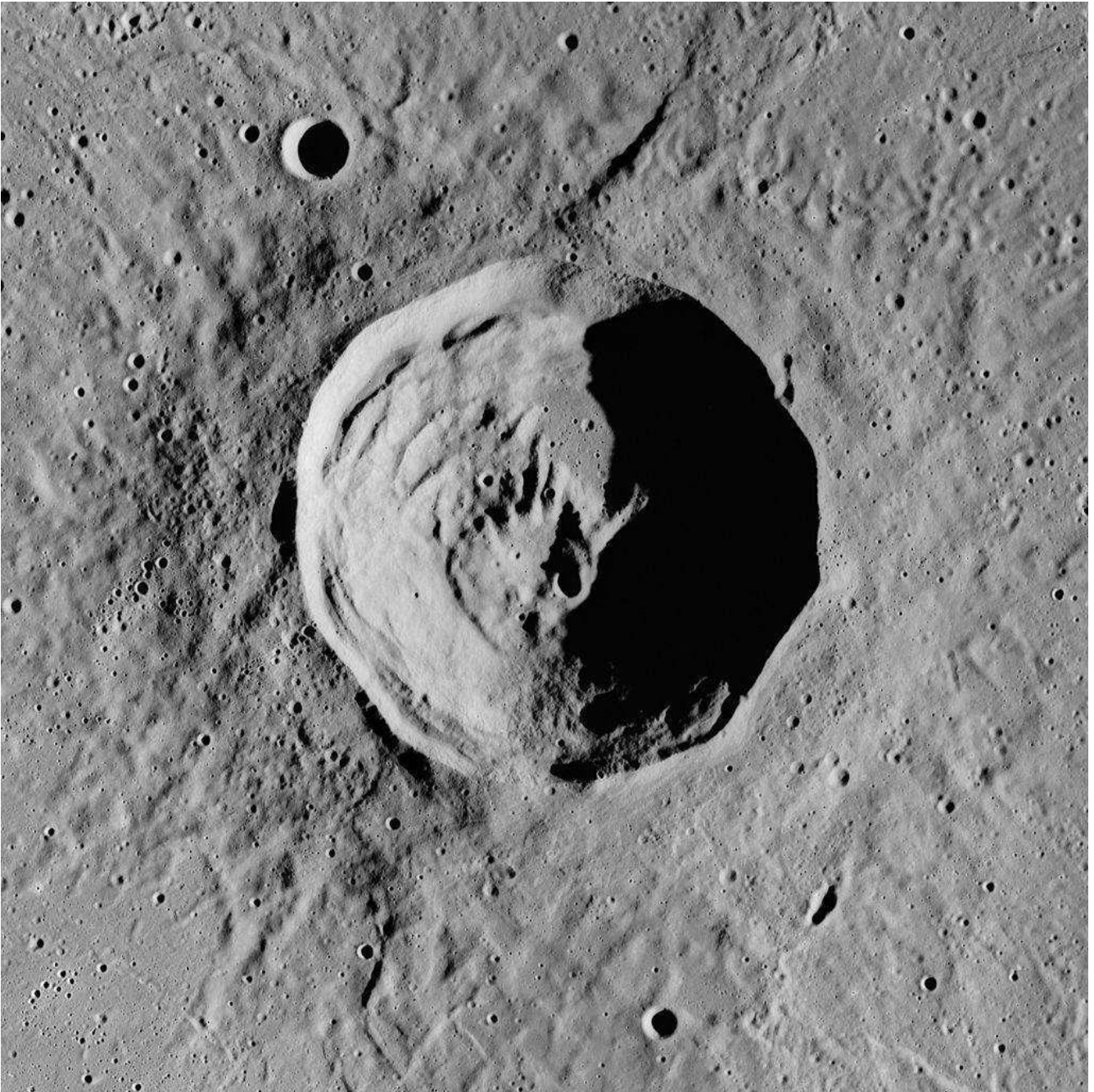
| | Latitude | Longitude | Diameter | Polarization min[1,8] | Color Index [2,7] | Albedo [3,7] | m [5,7] |
|----------|----------|-----------|----------|--------------------------|----------------------|-----------------|------------|
| Bonpland | 8.3° S | 17.4° W | 60 km | 1.30 | 1.24 | 14.20 | 13.50 |

116. Copernicus



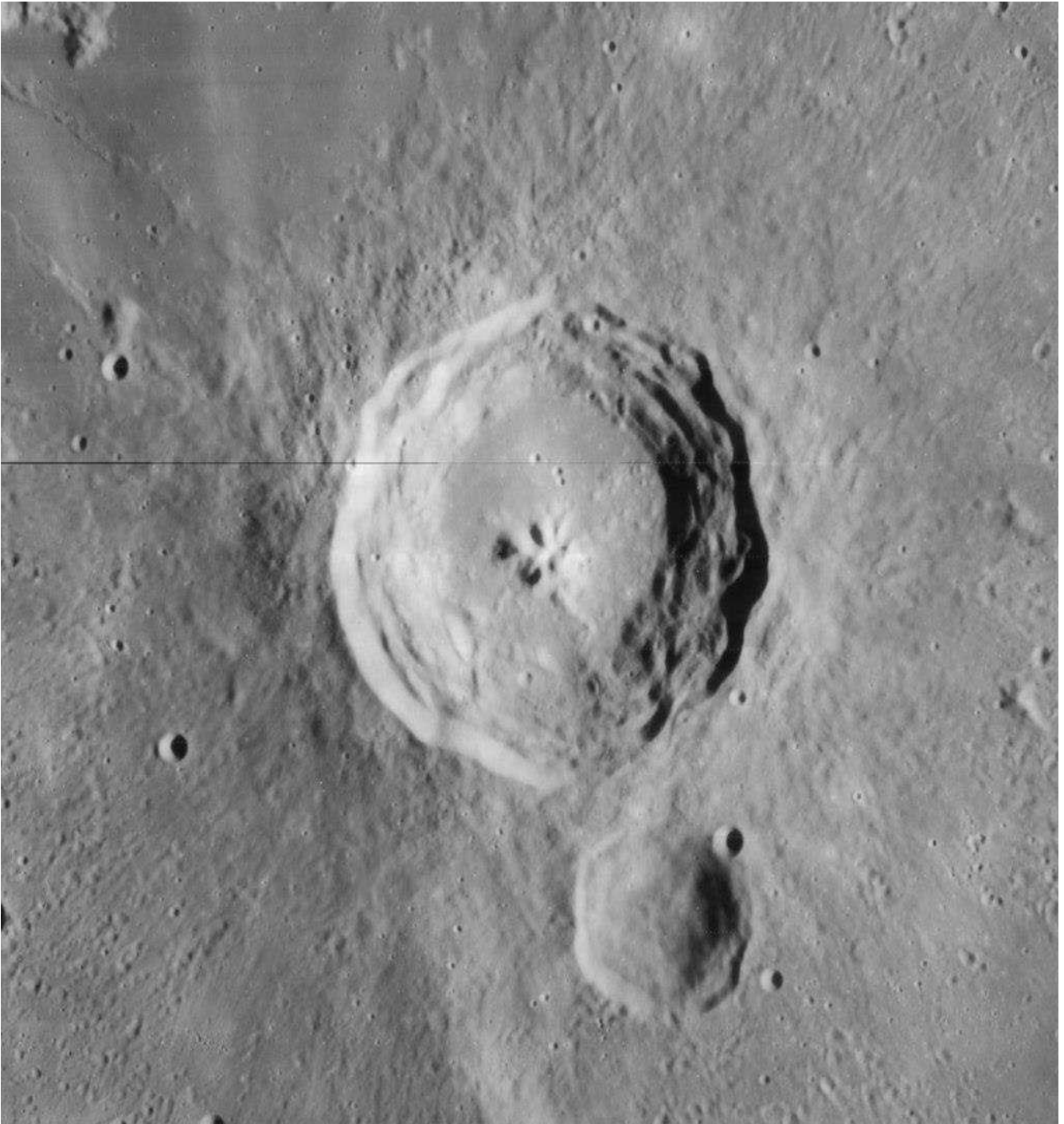
| | Latitude | Longitude | Diameter | Polarization | | Color Index [2,7] | Albedo [3,7] | m [5,7] |
|------------|----------|-----------|----------|-------------------|------------------|----------------------|-----------------|------------|
| Copernicus | 9.62° N | 20.08° W | 93 km | 0.74 min [1,8] | 4.0 max [4,8] | 1.26 | 18.50 | 16.60 |

117. Lambert



| | Latitude | Longitude | Diameter | Polarization min[1,8] | Color Index [2,7] | Albedo [3,7] | m [5,7] |
|---------|----------|-----------|----------|--------------------------|----------------------|-----------------|------------|
| Lambert | 25.8° N | 21° W | 30 km | 1.20 | 1.20 | 8.40 | 9.70 |

118. Bullialdus



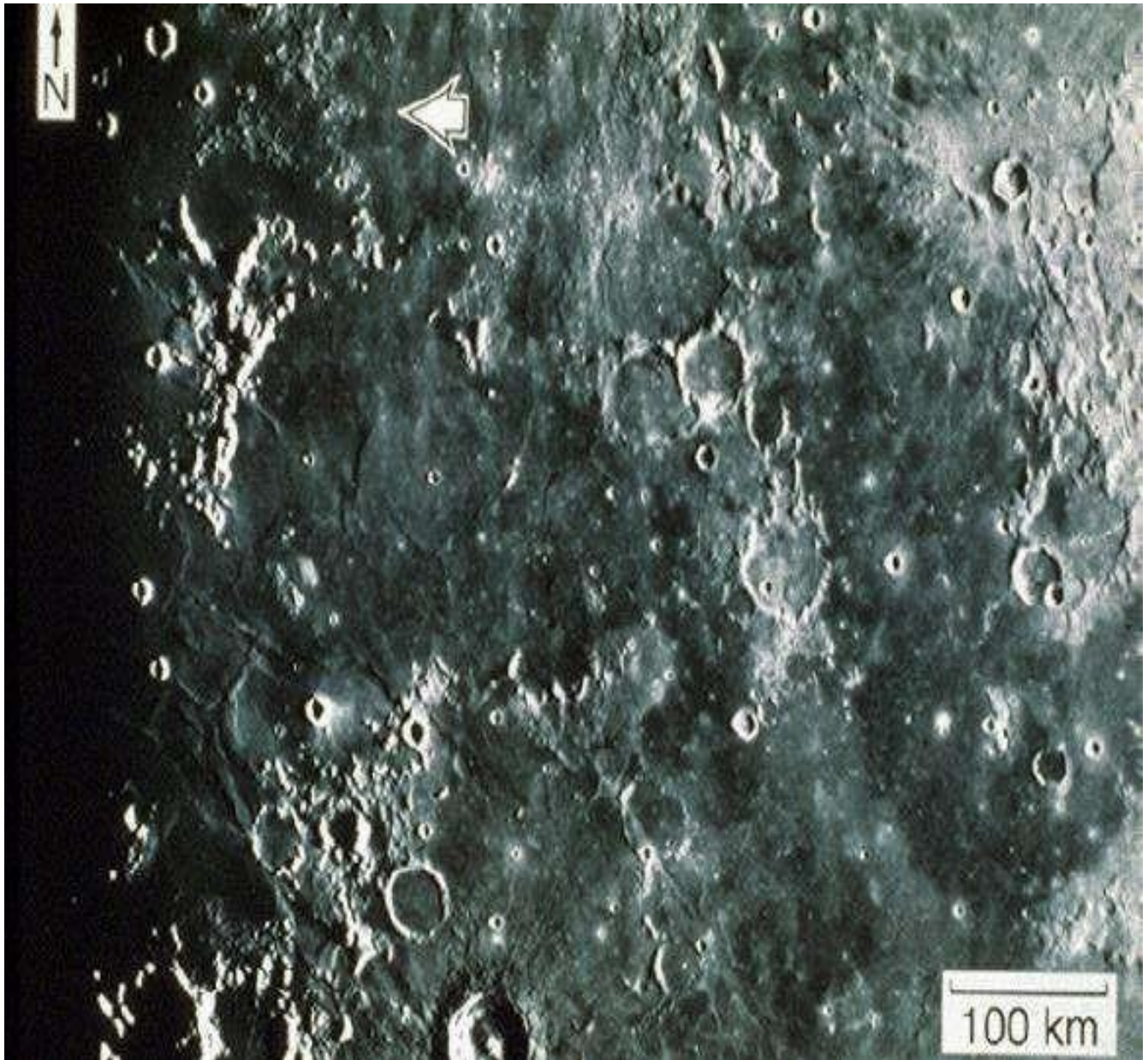
| | Latitude | Longitude | Diameter | Polarization min[1,8] | Color Index [2,7] | Albedo [3,7] | m [5,7] |
|------------|----------|-----------|----------|--------------------------|----------------------|-----------------|------------|
| Bullialdus | 20.7° S | 22.2° W | 61 km | 1.13 | 1.19 | 12.40 | 12.50 |

119. Reinhold



| | Latitude | Longitude | Diameter | Polarization min[1,8] | Color Index [2,7] | Albedo [3,7] | m [5,7] |
|----------|----------|-----------|----------|--------------------------|----------------------|-----------------|------------|
| Reinhold | 3.3° N | 22.8° W | 48 km | 1.21 | 1.19 | 13.30 | 10.90 |

120. Apollo 12 landing area



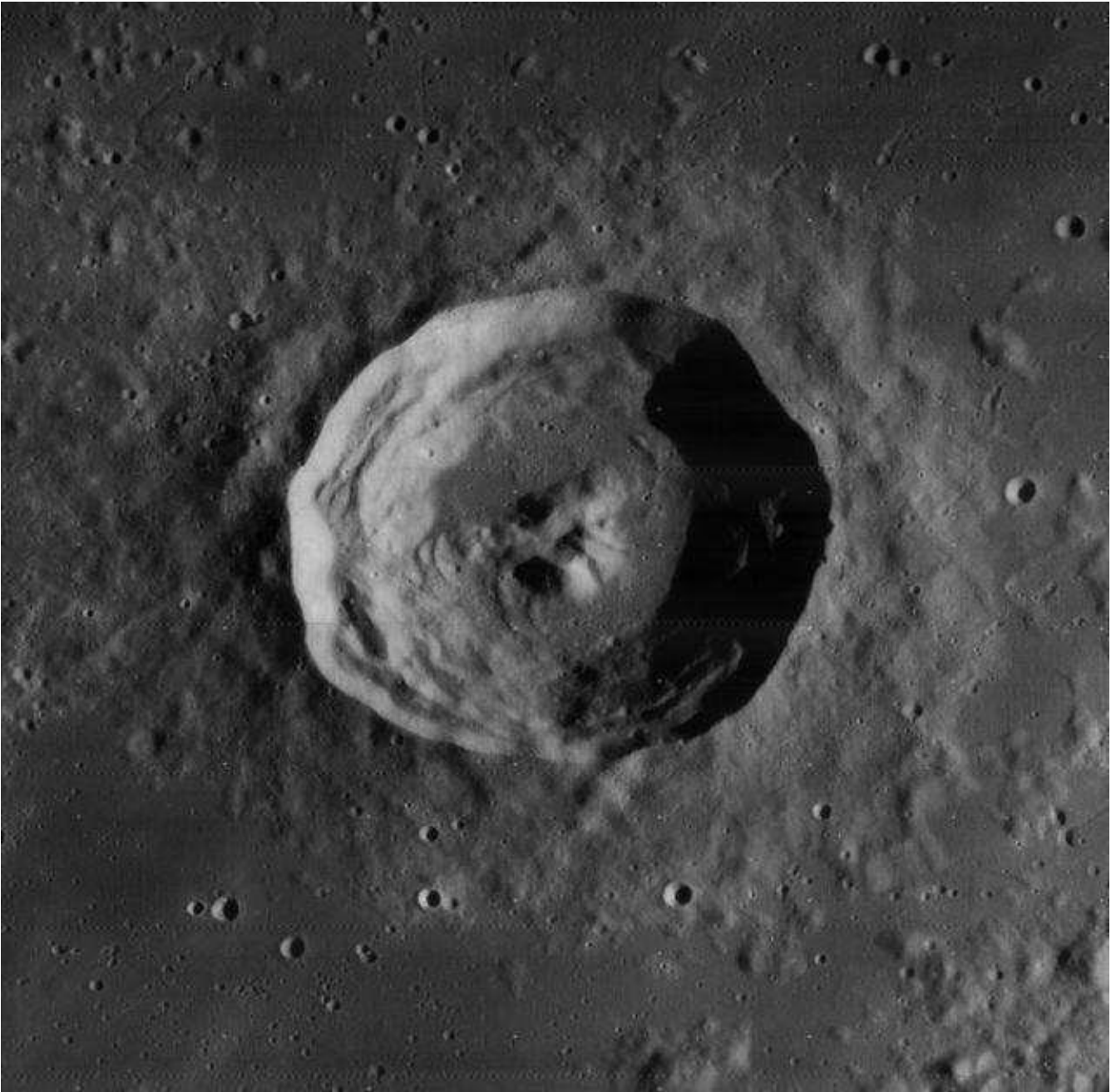
| | Latitude | Longitude | Diameter | Polarization min[1,8] | Color Index [2,7] | Albedo [3,7] | m [5,7] |
|---------------------------|----------|-----------|----------|--------------------------|----------------------|-----------------|------------|
| Apollo 12 landing area | 3.01° S | 23.42° W | 28 km | 1.05 | 1.19 | 9.70 | 10.90 |

121. Oceanus Procellarum



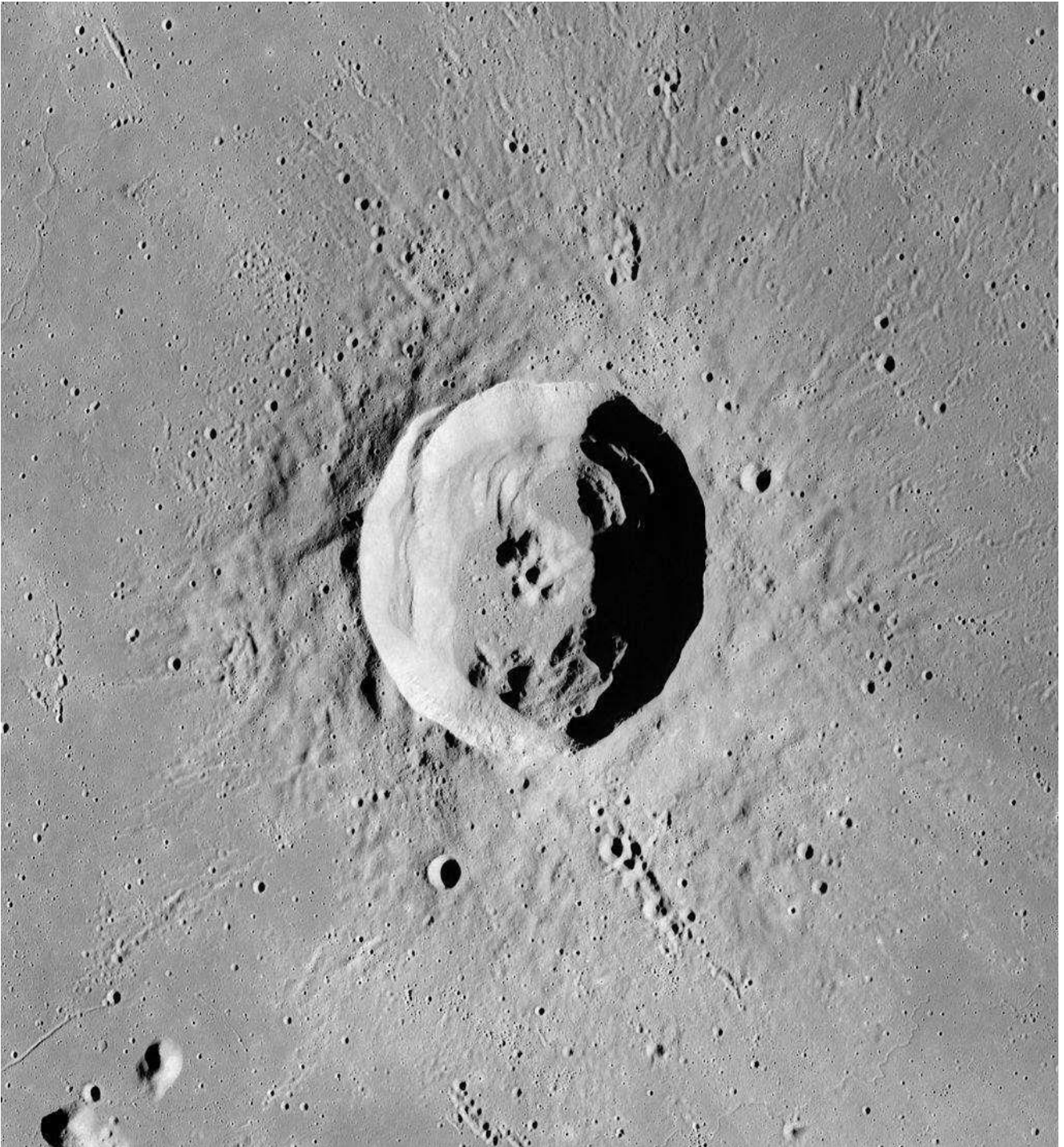
| | Latitude | Longitude | Diameter | Polarization min[1,8] | Color Index [2,7] | Albedo [3,7] | m [5,7] |
|------------------------|----------|-----------|----------|--------------------------|----------------------|-----------------|------------|
| Oceanus Procellarum | 18.4° N | 57.4° W | 2592 km | 1.11 | 1.18 | 7.60 | 7.00 |

122. Lansberg



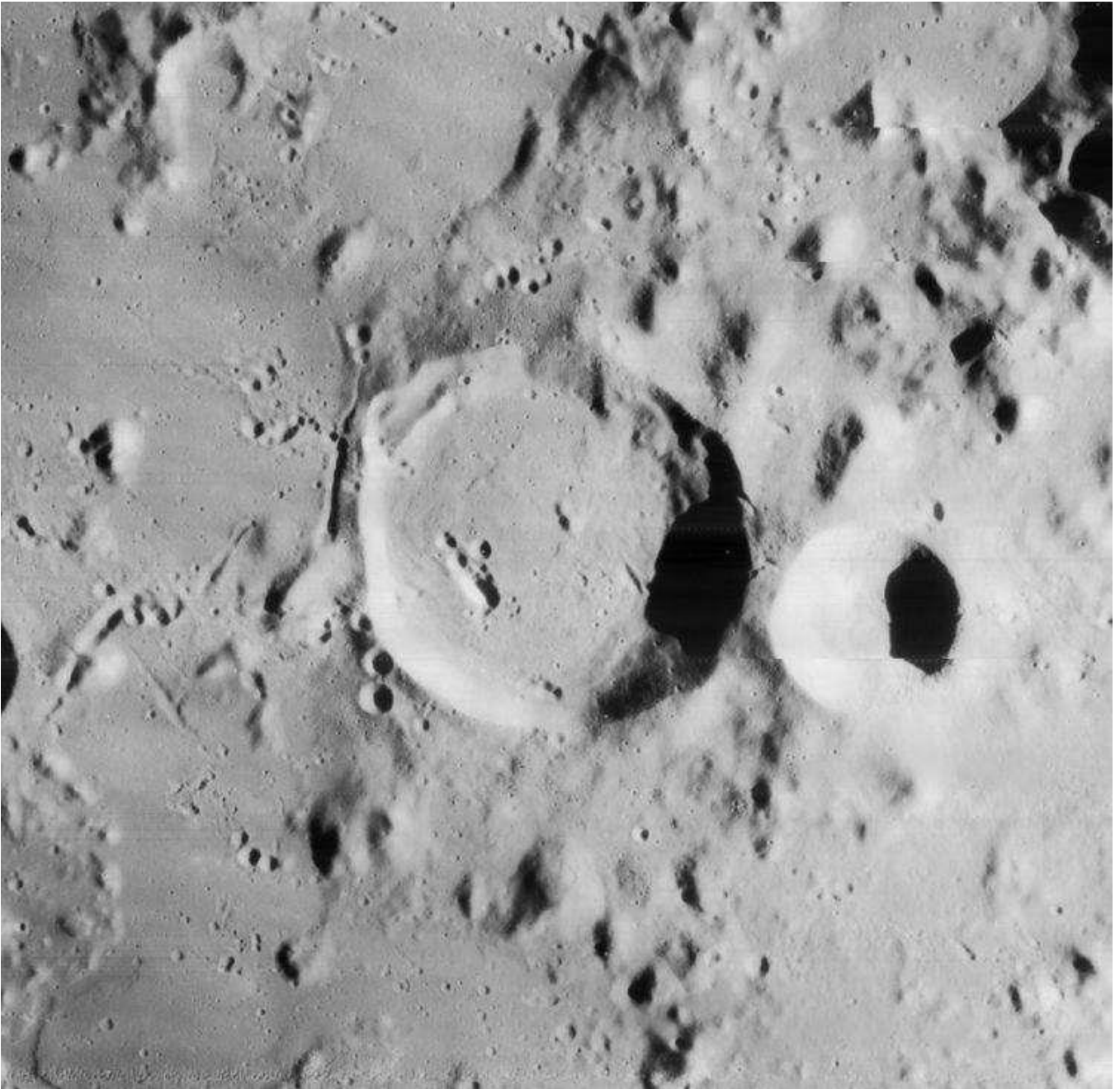
| | Latitude | Longitude | Diameter | Polarization min[1,8] | Color Index [2,7] | Albedo [3,7] | m [5,7] |
|----------|----------|-----------|----------|--------------------------|----------------------|-----------------|------------|
| Lansberg | 0.3° S | 26.6° W | 39 km | 1.12 | 1.19 | 9.30 | 10.90 |

123. Euler



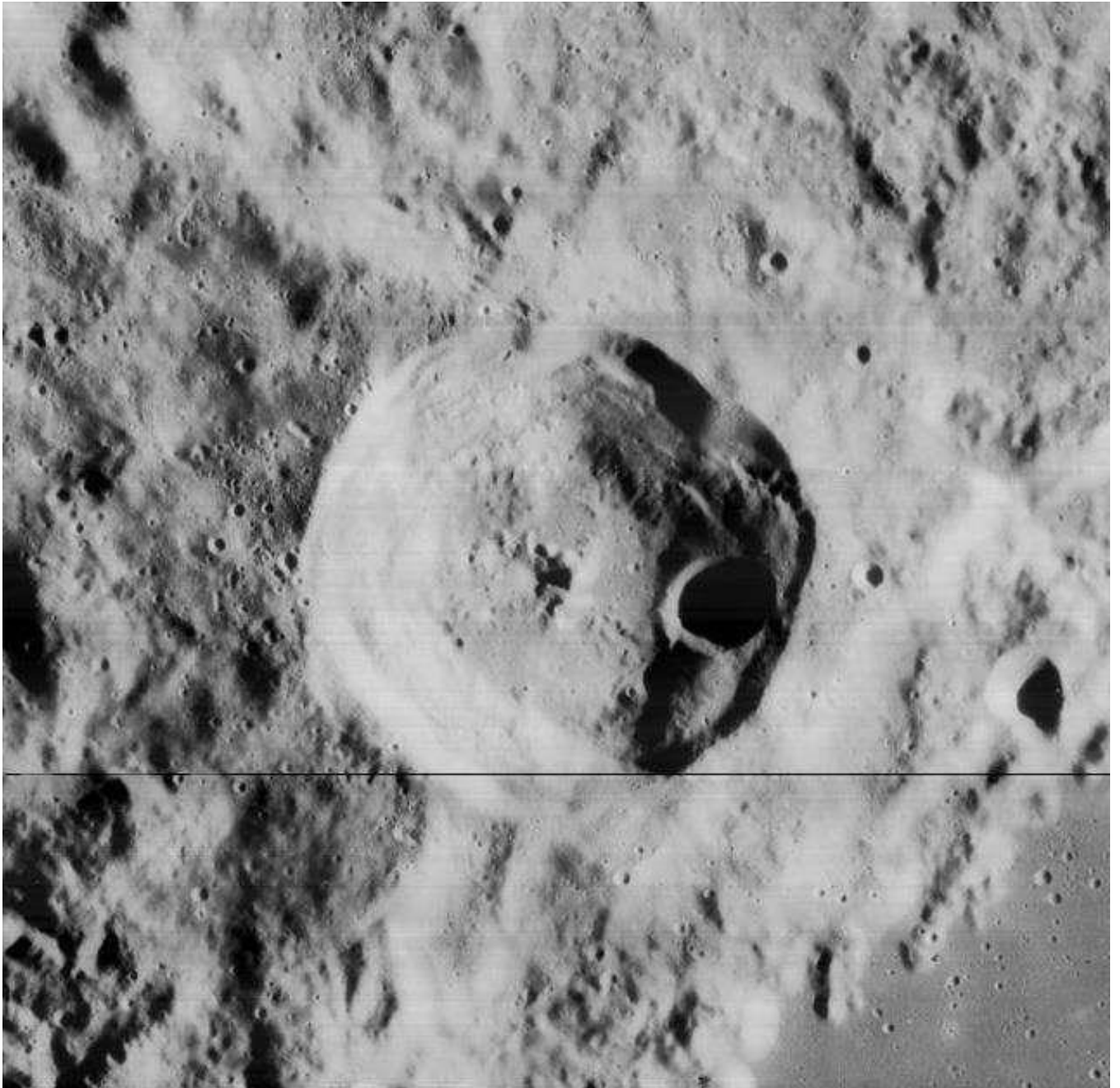
| | Latitude | Longitude | Diameter | Polarization min[1,8] | Color Index [2,7] | Albedo [3,7] | m [5,7] |
|-------|----------|-----------|----------|--------------------------|----------------------|-----------------|------------|
| Euler | 23.3° N | 29.2° W | 28 km | 1.21 | 1.24 | 12.40 | 10.20 |

124. T. Mayer



| | Latitude | Longitude | Diameter | Polarization min[1,8] | Color Index [2,7] | Albedo [3,7] | m [5,7] |
|----------|----------|-----------|----------|--------------------------|----------------------|-----------------|------------|
| T. Mayer | 15.6° N | 29.1° W | 33 km | 1.12 | 1.20 | 14.20 | 11.40 |

125. Bianchini



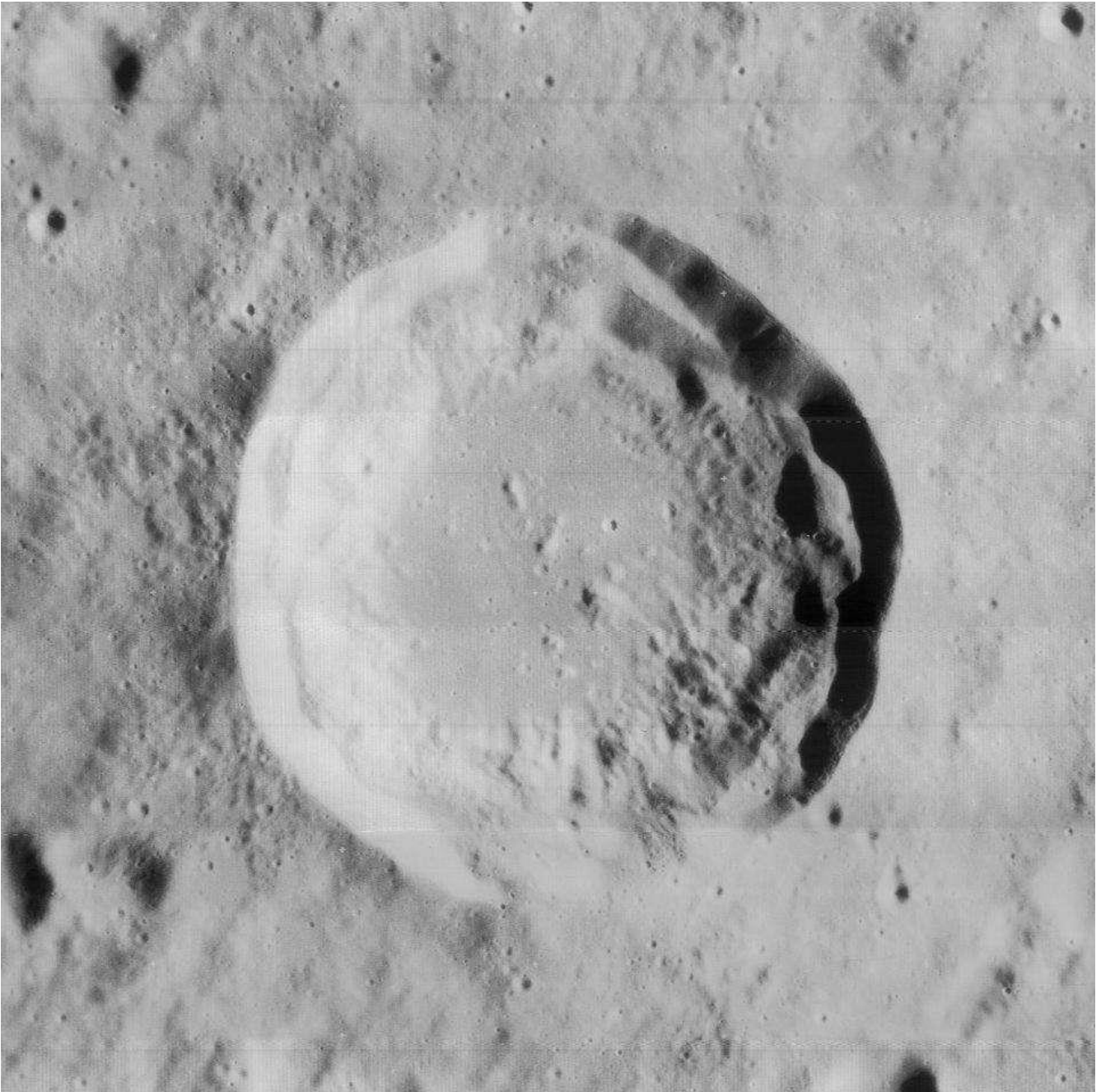
| | Latitude | Longitude | Diameter | Polarization min[1,8] | Color Index [2,7] | Albedo [3,7] | m [5,7] |
|-----------|----------|-----------|----------|--------------------------|----------------------|-----------------|------------|
| Bianchini | 48.7° N | 34.3° W | 38 km | 1.21 | 1.32 | 15.20 | 11.70 |

126. Kepler



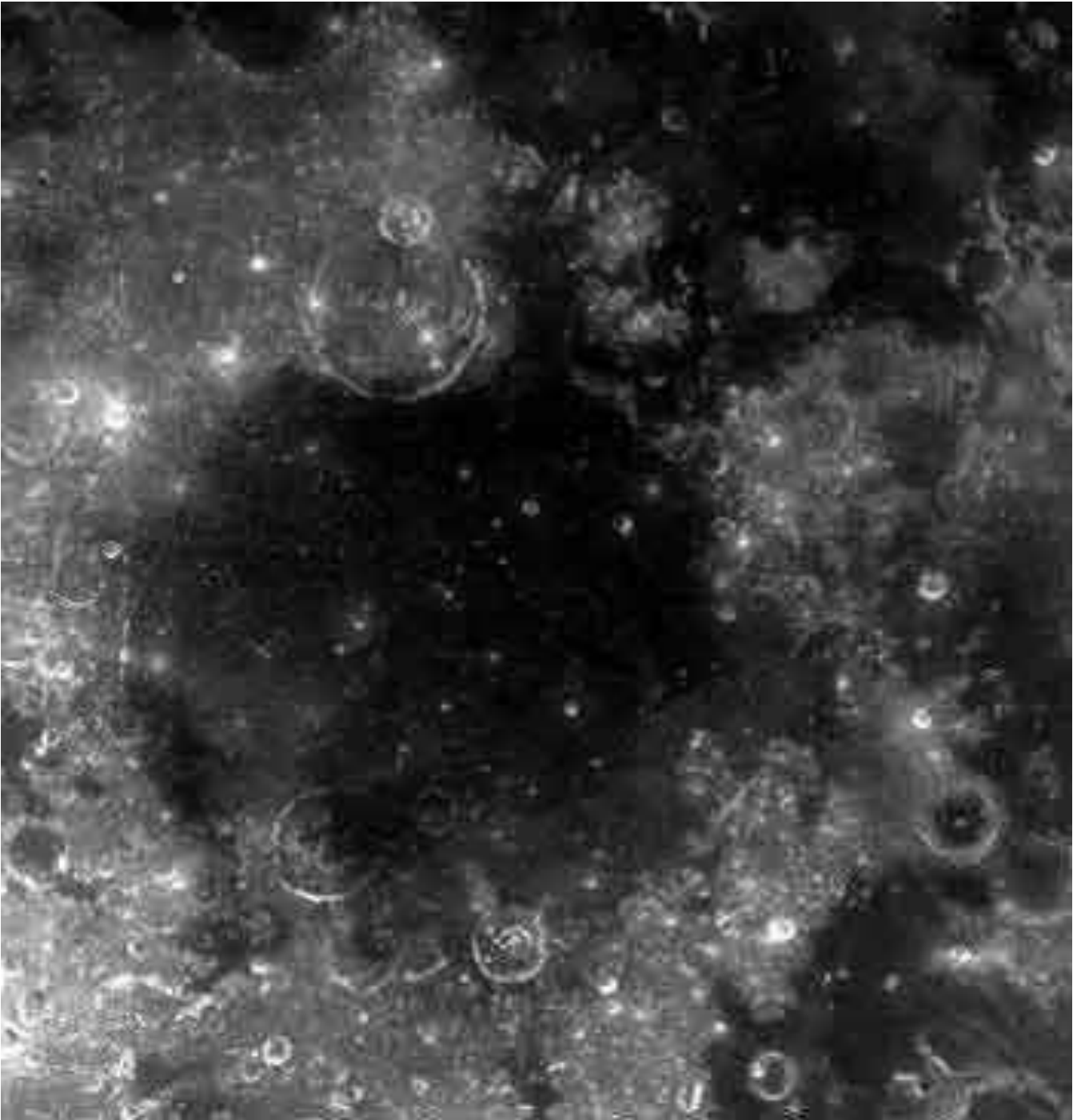
| | Latitude | Longitude | Diameter | Polarization | | Color Index [2,7] | Albedo [3,7] | m [5,7] |
|--------|----------|-----------|----------|-------------------|------------------|----------------------|-----------------|------------|
| Kepler | 8.1° N | 38° W | 32 km | 0.85 min [1,8] | 3.9 max [4,8] | 1.22 | 17.20 | 11.70 |

127. Mairan



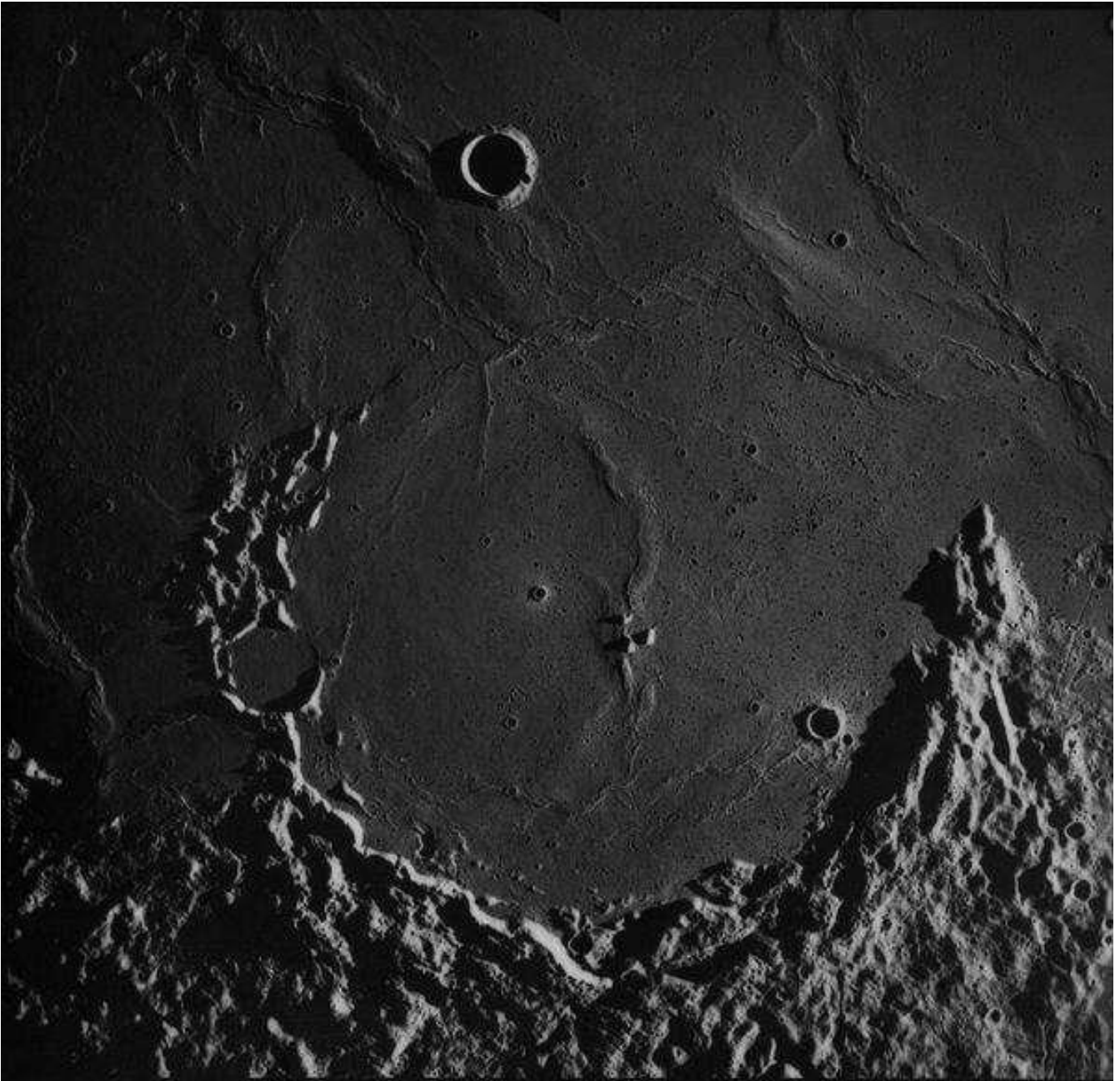
| | Latitude | Longitude | Diameter | Polarization min[1,8] | Color Index [2,7] | Albedo [3,7] | m [5,7] |
|--------|----------|-----------|----------|--------------------------|----------------------|-----------------|------------|
| Mairan | 41.6° N | 43.4° W | 40 km | 1.30 | 1.29 | 15.20 | 14.10 |

128. Mare Humorum



| | Latitude | Longitude | Diameter | Polarization min[1,8] | Color Index [2,7] | Albedo [3,7] | m [5,7] |
|--------------|----------|-----------|----------|--------------------------|----------------------|-----------------|------------|
| Mare Humorum | 24.4° S | 38.6° W | 389 km | 1.11 | 1.18 | 8.00 | 8.20 |

129. Letronne



| | Latitude | Longitude | Diameter | Polarization min[1,8] | Color Index [2,7] | Albedo [3,7] | m [5,7] |
|----------|----------|-----------|----------|--------------------------|----------------------|-----------------|------------|
| Letronne | 10.6° S | 42.4° W | 120 km | 1.24 | 1.17 | 8.40 | 8.20 |

130. Harpalus



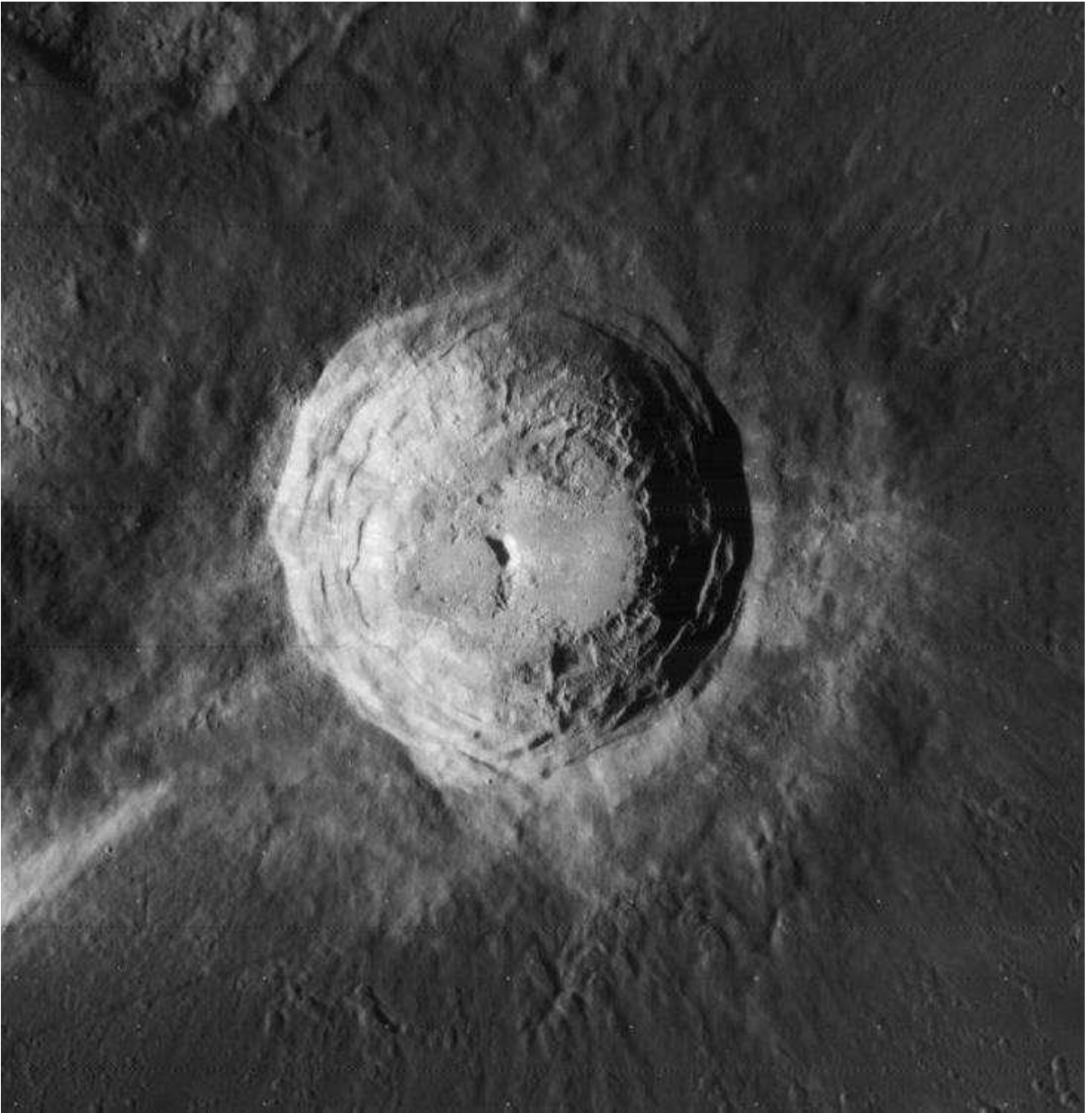
| | Latitude | Longitude | Diameter | Polarization min[1,8] | Color Index [2,7] | Albedo [3,7] | m [5,7] |
|----------|----------|-----------|----------|--------------------------|----------------------|-----------------|------------|
| Harpalus | 52.6° N | 43.4° W | 39 km | 1.16 | 1.29 | 9.30 | 10.20 |

131. Flamsteed



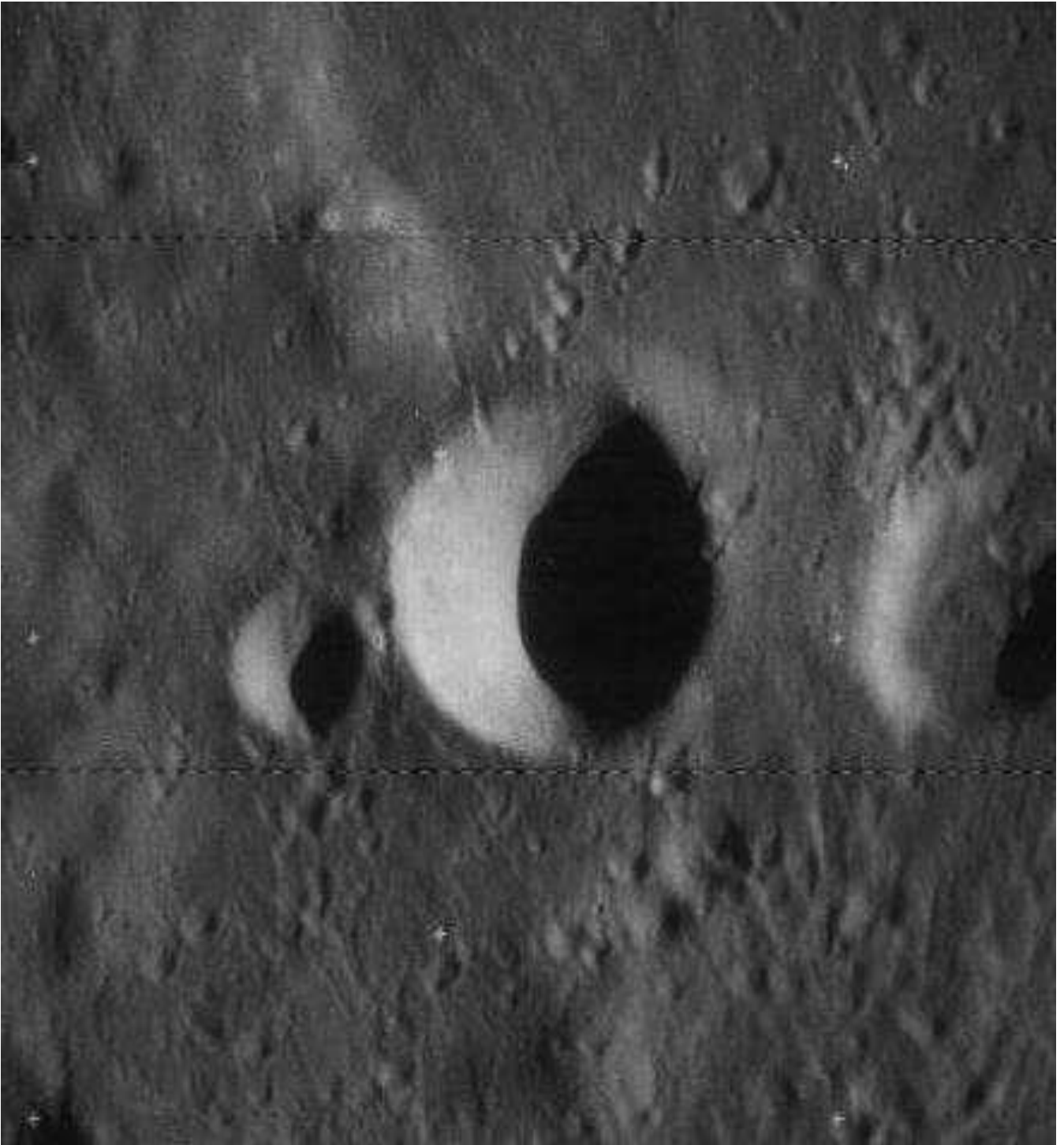
| | Latitude | Longitude | Diameter | Polarization min[1,8] | Color Index [2,7] | Albedo [3,7] | m [5,7] |
|-----------|----------|-----------|----------|--------------------------|----------------------|-----------------|------------|
| Flamsteed | 4.5° S | 44.3° W | 21 km | 1.07 | 1.09 | 9.70 | 8.20 |

132. Aristarchus



| | Latitude | Longitude | Diameter | Polarization min [1,8] | Color Index [2,7] | Albedo [3,7] | m [5,7] |
|-------------|----------|-----------|----------|------------------------|-------------------|--------------|---------|
| Aristarchus | 23.7° N | 47.4° W | 40 km | 0.66 | 1.19 | 12.40 | 13.50 |

133. Vaisala



| | Latitude | Longitude | Diameter | Polarization min[1,8] | Color Index [2,7] | Albedo [3,7] | m [5,7] |
|---------|----------|-----------|----------|--------------------------|----------------------|-----------------|------------|
| Vaisala | 25.9° N | 47.8° W | 8 km | 1.01 | 1.20 | 11.60 | 12.50 |

134. Herodotus



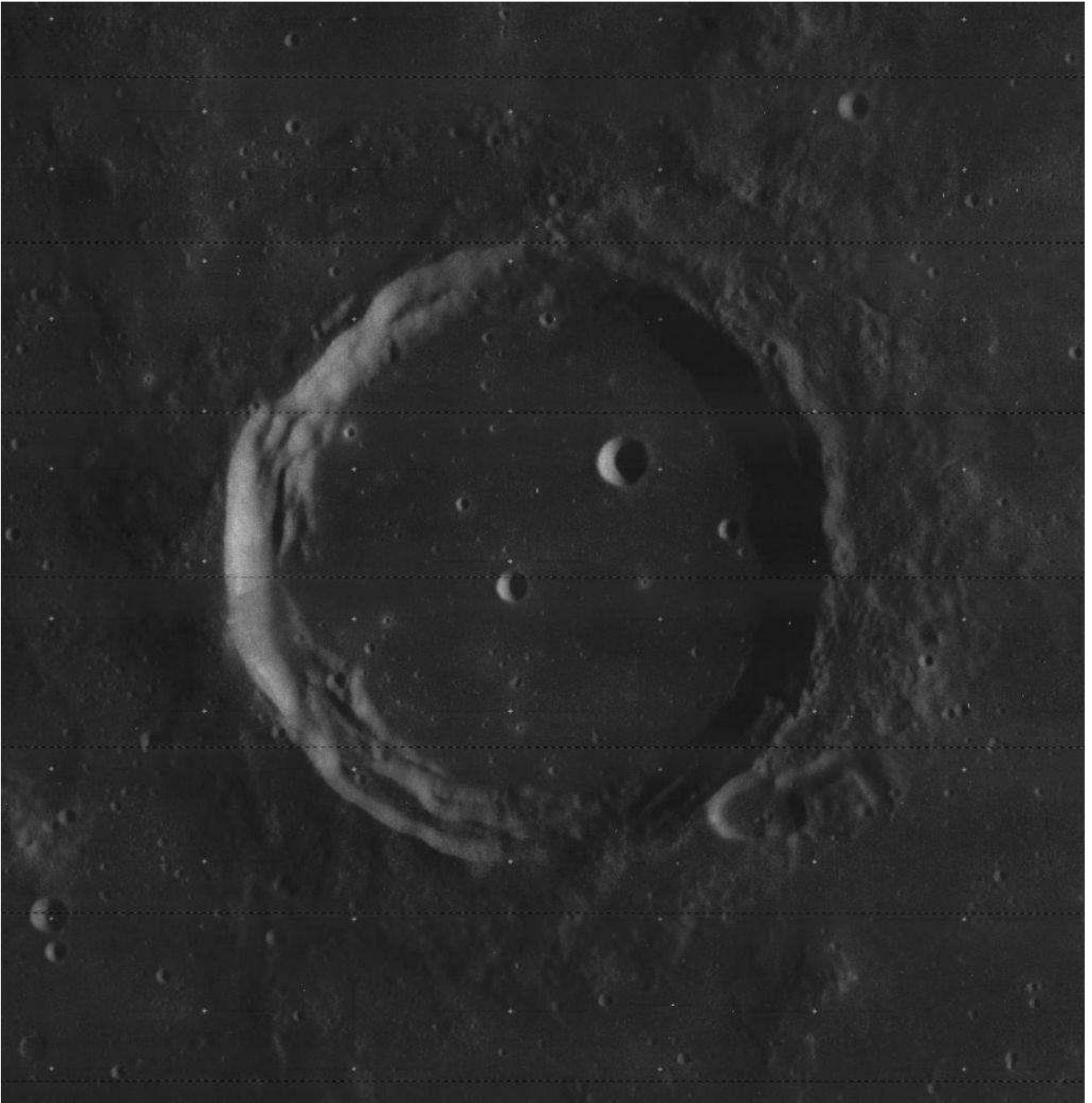
| | Latitude | Longitude | Diameter | Polarization min [1,8] | Color Index [2,7] | Albedo [3,7] | m [5,7] |
|-----------|----------|-----------|----------|---------------------------|----------------------|-----------------|------------|
| Herodotus | 23.2° N | 49.7° W | 35 km | 1.05 | 1.22 | 15.20 | 11.40 |

135. Billy



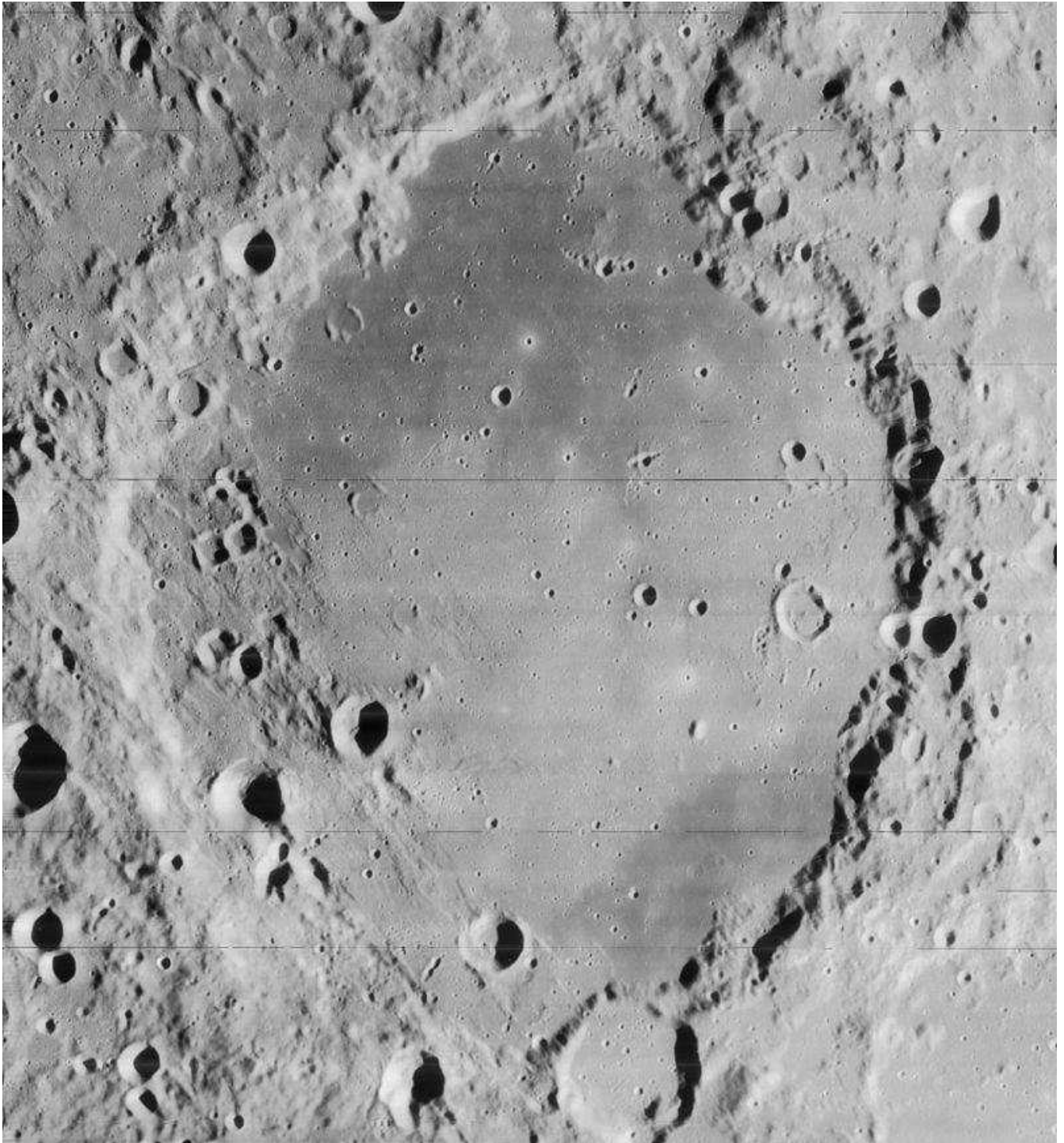
| | Latitude | Longitude | Diameter | Polarization min[1,8] | Color Index [2,7] | Albedo [3,7] | m [5,7] |
|-------|----------|-----------|----------|--------------------------|----------------------|-----------------|------------|
| Billy | 13.8° N | 50.1 W | 45 km | 1.25 | 1.20 | 9.30 | 7.50 |

136. Marius



| | Latitude | Longitude | Diameter | Polarization min[1,8] | Color Index [2,7] | Albedo [3,7] | m [5,7] |
|--------|----------|-----------|----------|--------------------------|----------------------|-----------------|------------|
| Marius | 11.9° N | 50.8° W | 41 km | 1.19 | 1.20 | 9.00 | 7.50 |

137. Schickard



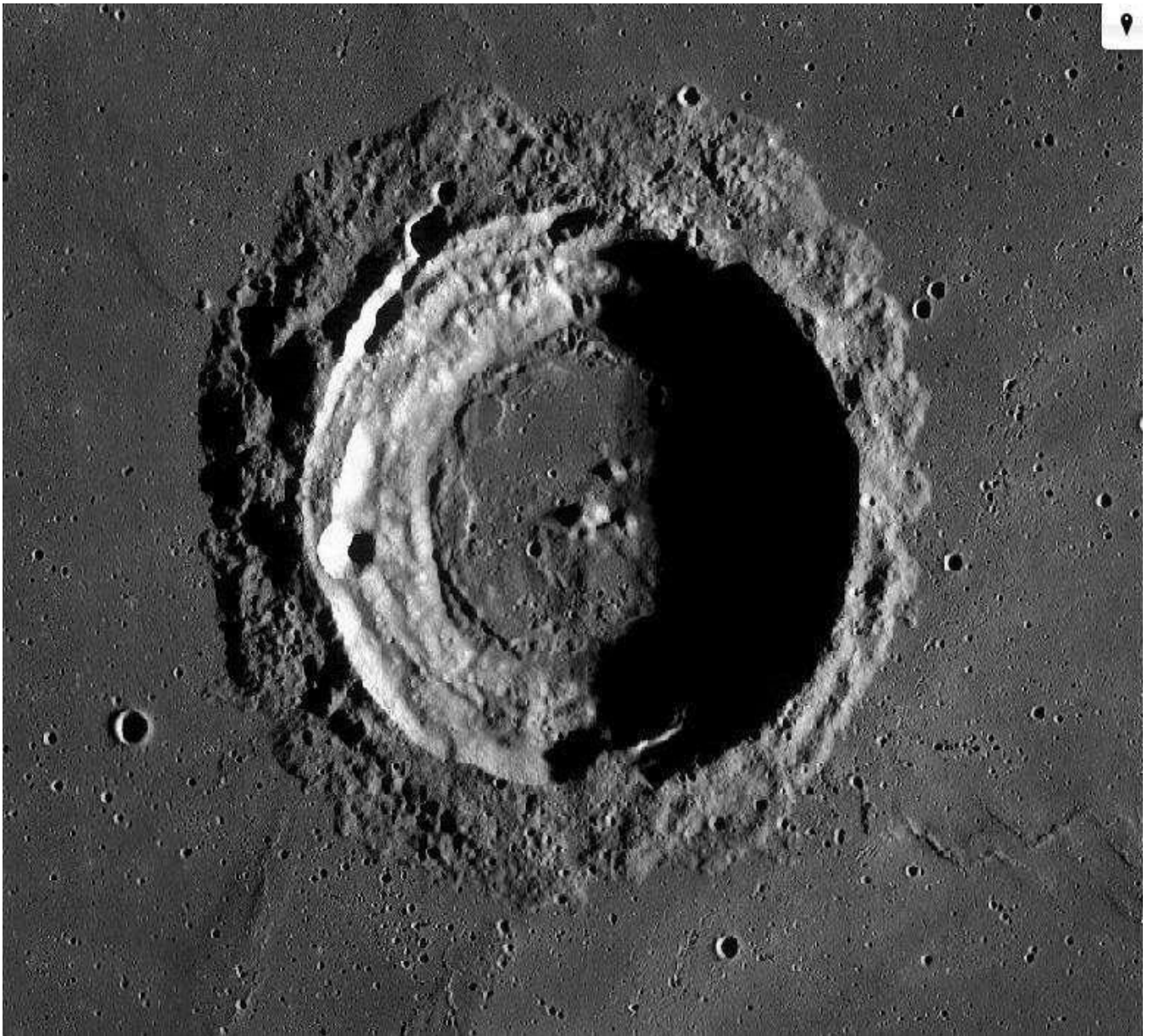
| | Latitude | Longitude | Diameter | Polarization min [1,8] | Color Index [2,7] | Albedo [3,7] | m [5,7] |
|-----------|----------|-----------|----------|---------------------------|----------------------|-----------------|------------|
| Schickard | 44.4° S | 54.6° W | 227 km | 1.19 | 1.24 | 16.20 | 10.20 |

138. Reiner



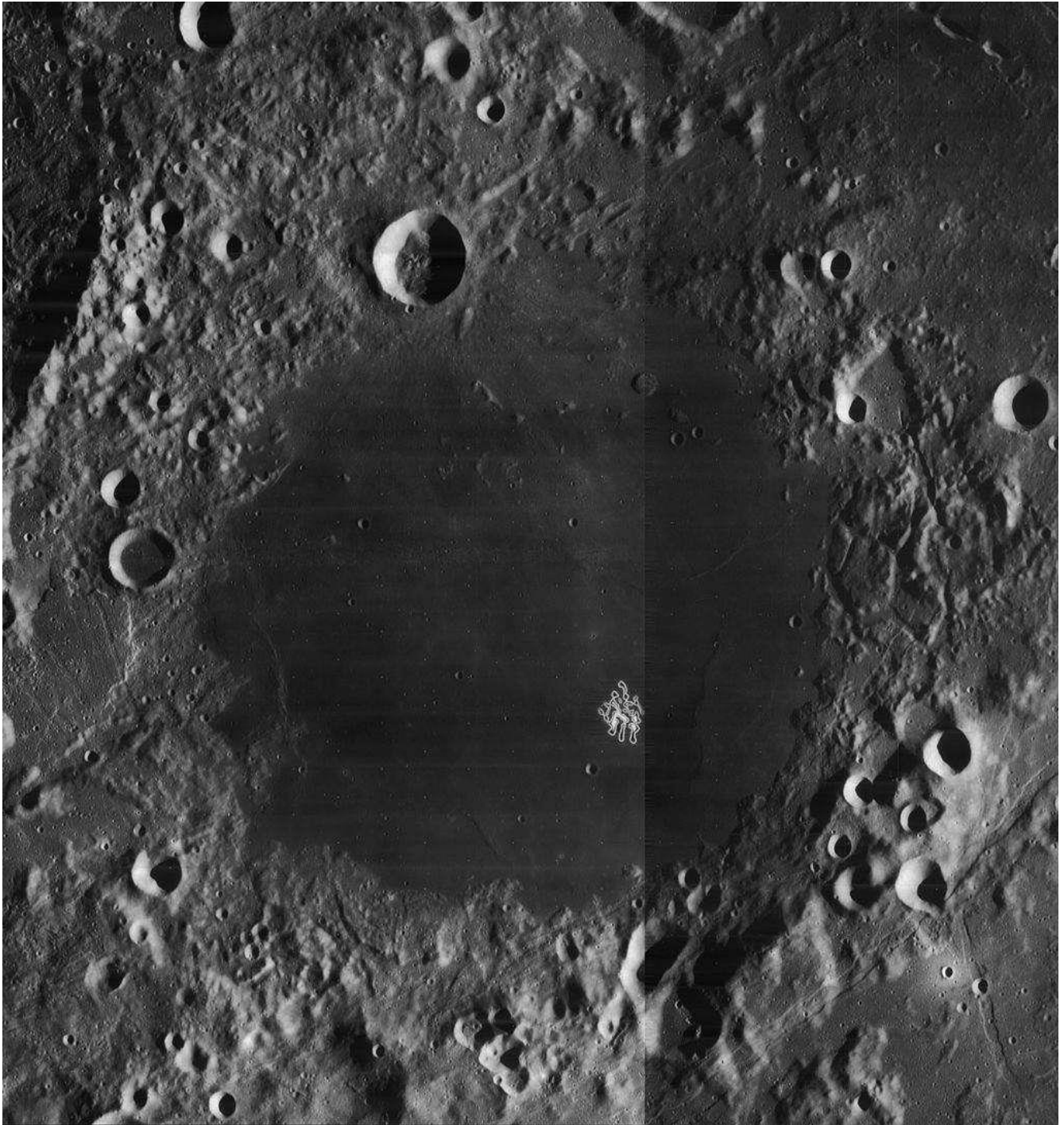
| | Latitude | Longitude | Diameter | Polarization min[1,8] | Color Index [2,7] | Albedo [3,7] | m [5,7] |
|--------|----------|-----------|----------|--------------------------|----------------------|-----------------|------------|
| Reiner | 7° N | 54.9° W | 30 km | 1.03 | 1.18 | 9.00 | 8.20 |

139. Seleucus



| | Latitude | Longitude | Diameter | Polarization min[1,8] | Color Index [2,7] | Albedo [3,7] | m [5,7] |
|----------|----------|-----------|----------|--------------------------|----------------------|-----------------|------------|
| Seleucus | 21° N | 66.6° W | 61 km | 1.26 | 1.18 | 9.70 | 8.20 |

140. Grimaldi



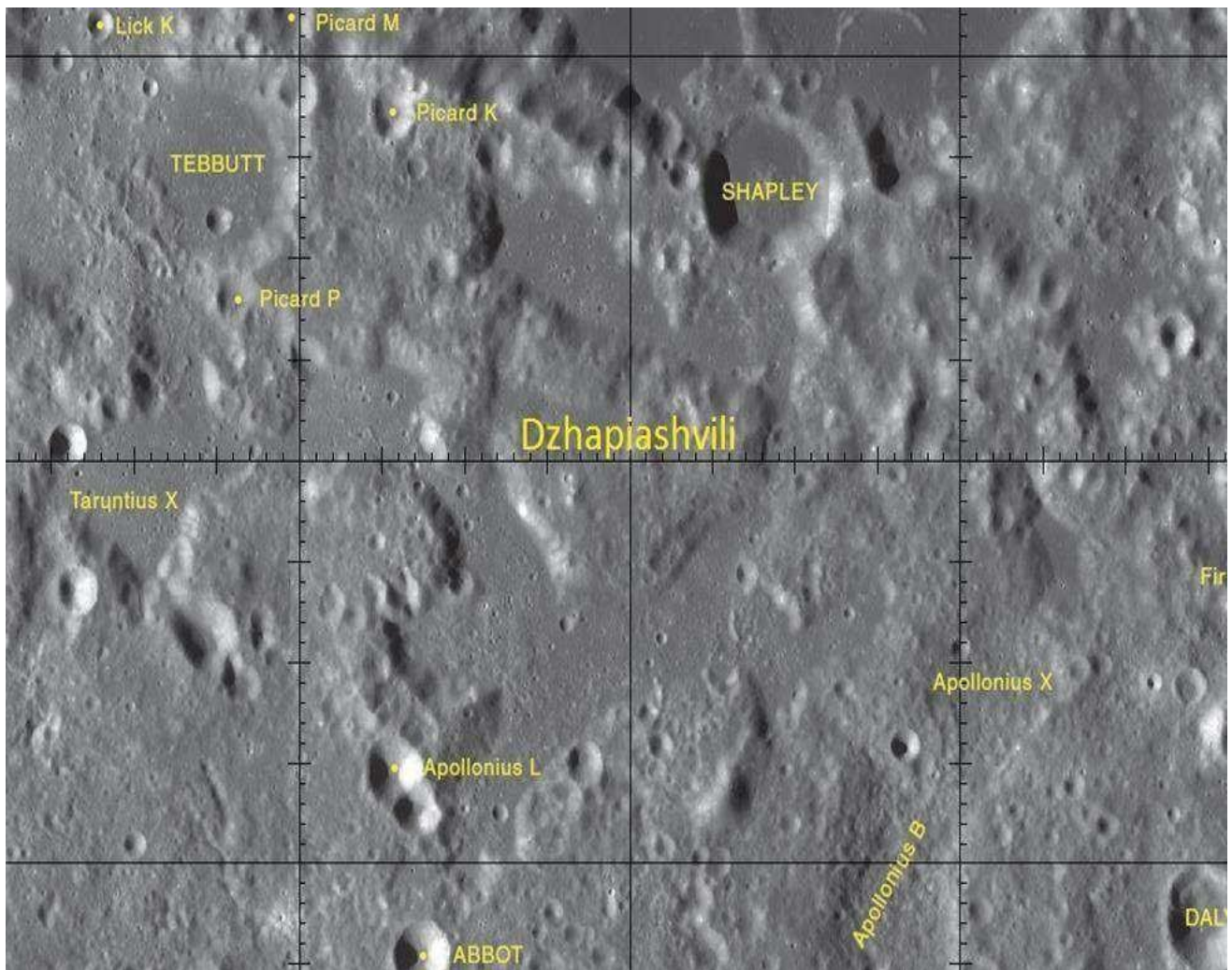
| | Latitude | Longitude | Diameter | Polarization min [1,8] | Color Index [2,7] | Albedo [3,7] | m [5,7] |
|----------|----------|-----------|-----------|---------------------------|----------------------|-----------------|------------|
| Grimaldi | 5.2° S | 68.6° W | 173.49 km | 1.30 | 1.19 | 15.20 | 8.90 |

141. Eddington



| | Latitude | Longitude | Diameter | Polarization min[1,8] | Color Index [2,7] | Albedo [3,7] | m [5,7] |
|-----------|----------|-----------|----------|--------------------------|----------------------|-----------------|------------|
| Eddington | 21.5° N | 71.8° W | 125 km | 1.31 | 1.19 | 9.30 | 8.20 |

142. Dzhapiashvili



| | Latitude | Longitude | Diameter | Polarization | | Color Index [2,7] | Albedo [3,7] | m [5,7] |
|---------------|----------|-----------|----------|-------------------|-------------------|----------------------|-----------------|------------|
| Dzhapiashvili | 7.5° N | 56.5° E | 48 km | 1.20 min [1,8] | 18.0 max [4,8] | 1.32 | 13.30 | 14.1 |

3. Conclusions

According to the given data, there are similar places on the moon:

When Confidence Probability the Equally 0.98

Mare Imbrium (North from Autolycus) similar Apollo 16 landing area Bessel – Picard

When Confidence Probability the Equally 0.97

Picard – Hooke Bessel – Picard

Mare Imbrium (North from Autolycus) - Apollo 16 landing area

When Confidence

Probability the Equally

0.96 Mare Fecunditatis –

Hooke Bessel – Hooke

Picard – Hooke Bessel –

Picard

Aristillus - Apollo 17 landing area Bullialdus – Cleomedes

Cleomedes - Mare Imbrium (North from Autolycus) Cleomedes -

Apollo 16 landing area Mare Imbrium (North from Autolycus) -

Apollo 16 landing area Mare Nectaris – Timocharis quillitatis,

Oceanus Procellarum, Luna 16 landing area.

And so on...

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Data: Latitude, Longitude, Diameter, Moon fragment of taken

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